PORT ST. LUCIE CITY COUNCIL
AGENDA ITEM REQUEST

COUNCIL ITEM 13 B
DATE 11/19/12

Meeting Date: November 19, 2012

Public Hearing ____ Ordinance ____ Resolution ____ Motion X

Item: #20120061 Professional Engineering Design Services for Crosstown Parkway Extension- Manth to US1

Recommended Action:

1) Approve firms short listed by the evaluation committee as follows: #1. American Consulting Engineers of Florida, LLC. and #2. Keith and Schnars, P.A. and start negotiation with #1 ranked firm American Consulting Engineer of Florida, LLC. The negotiation will be for the first phase of the project only which is the preparation and completion of the topographic and control survey for the proposed roadway and right-of way mapping. If unable to negotiate a contract with #1 firm, approve to continue process and negotiate with #2 firm Keith and Schnars, P.A. Subsequent phases if any, will be submitted to the City Council for approval.

Exhibits: Department memo attached [ ] yes [X] no
Copies of the Specifications, Score Sheets, and Proposals

NOTE: Offers from vendors listed herein are the only offers received timely as of the above opening date and time. All other offers submitted in response to this solicitation, if any, are hereby rejected as late.

Summary Explanation/Background Information: The work for this project is to be completed in four (4) phases. Any or all of the phases may be divided into segments at the discretion of the City. At this time, only Phase I is authorized. However, the selected firm has the capacity to complete all phases if directed by the City. The Request for Proposal was advertised August 18, 2012, for the Professional Engineering Design Services for Crosstown Parkway Extension from Manth to US1. A proposal notification was sent to 1,562 suppliers and 59 firms requested proposals. The proposal was opened September 18, 2012, at 3:00 P.M. and 2 firms responded. After research by the Office of Management of the plan holders, it was clear that re-bidding would not result in additional submittals. The evaluation committee met October 10, 2012, at 11:00 A.M. and as a consensus short listed and scored as follows: American Consulting Engineers of Florida, LLC. as #1 and Keith and Schnars, P.A. as #2. The evaluation committee voted to conduct interviews with both firms. The evaluation committee viewed presentations and a question and answer session with both firms on October 16, 2012 at 10:00 A.M. It was agreed by all committee members that both firms had the qualifications required and ability to provide the design for this project. The committee felt that American Consulting Engineers of Florida, LLC. presented more specific cost saving ideas and provided an innovative design approach.
The need for the above is: Design Services for Crosstown Parkway
Purchase is not a replacement Purchase is budgeted.
Department requests expenditure from the following:

Fund	314	Crosstown Parkway
Cost Center	4105	Eng Operation
Object Code	568813	Professional Services
Project	22004	Crosstown Segment 1

NOV 15 '12 AM 3:52

Director of OMB concurs with award: City Manager concurs with award

RECEIVED
NOV 13 2012
City Manager's Office

Department requests 0 minutes to make a presentation.
Submitted by: Committee

Date Submitted: 10/16/2012

BID NOTIFICATION

BID # 20120061
Date: October 11, 2012
Design Crosstown Pky Manth to US 1

Notification

This is notification that the evaluation committee met on October 10, 2012 at 10:00 A.M. in the Office of Management and Budget, Room 390, 121 SW Port St. Lucie Blvd., Building A, Port St. Lucie, Florida and selected the two firms below for a question and answer interview at the designated times;

Firm	Interview time
American Consulting Engineers of Florida, LLC	10:00 AM
Keith and Schnars, P.A.	11:05 AM

This is a public meeting and all firms and the public are invited to attend the entire meeting from 10:00 PM until 12:15 AM. It is the intention of the committee to determine the short list at the end of the Question & Answer session.

The question and answer session will be held on October 16, 2012 starting at 10 A.M. in Building B, Training Room, 121 SW Port St. Lucie Blvd., Port St. Lucie, Florida. The presentations are to be specific concerning the questions listed below:

1. State and clarify the responsibility and task of each sub that was listed in the submitted proposal for this project

2. Provide detail information concerning the bridge design and the bridge design experience with this type of construction of your firm and the subs that will be working on this section of the project.

3. Provide any relative FDOT qualifications for this project that was not included in the proposal or a justification of why they are not needed for this project.

4. Provide innovative ideas for design and any cost saving thoughts your firm has for this project.

5. Provide why your firm is the best selection for this project.

The format of the meeting will be

A. 20 minutes for presentation by the firm
B. 40 minutes for questions from committee members

A projector and laptop will be available if needed. If you are providing handouts, five will be needed. Also, please provide an electronic copy for the file of any handouts or power point presentations (you may email this to me after the presentation).

Anticipated Short List approval for City Council is October, 22, 2012.

Please contact me if you have any questions, at cheryls@cityofpsl.com or 772 871 7390.

Thank you
Cheryl Shanaberger **MPA CPPO**
Deputy Director of OMB

RFP 2012061 Design Crosstown Ext. Manth to US 1 10/10/12 @ 10

Evaluation Commitee Individual Scores

American		JA		DB		BM		LS	
Criterion	WTG	Points	Total	Points	Total	Points	Total	Points	Total
Proposer Information	1	2	2	3	3	1	1	3	3
Org Chart	1	3	3	3	3	3	3	3	3
Sub Consultant Inf	1	3	3	2	2	1	1	3	3
Exp on Similar Projects	3	5	15	4	12	2	6	4	12
Key Individuals	2	5	10	3	6	2	4	5	10
Location of Work	1	5	5	5	5	4	4	5	5
Project Approach	5	5	25	4	20	4	20	5	25
Time Commitment & Schedule	5	5	25	4	20	4	20	4	20
Pre-proposal meeting	1	5	5	5	5	5	5	5	5
P-Card	1	3	3	3	3	3	3	3	3
Minority Business	1	0	0	0	0	0	0	0	0
Total			96		79		67		89
Ranking		1		1		2		1	
Keith & Schnars		JA		DB		BM		LS	
Criterion	WTG	Points	Total	Points	Total	Points	Total	Points	Total
Proposer Information	1	3	3	3	3	3	3	2	2
Org Chart	1	4	4	3	3	3	3	4	4
Sub Consultant Inf	1	2	2	3	3	3	3	2	2
Exp on Similar Projects	3	4	12	3	9	4	12	5	15
Key Individuals	2	4	8	3	6	4	8	4	8
Location of Work	1	4	4	5	5	2	2	4	4
Project Approach	5	4	20	3	15	4	20	4	20
Time Commitment & Schedule	5	4	20	4	20	4	20	5	25
Pre-proposal meeting	1	5	5	5	5	5	5	5	5
P-Card	1	3	3	3	3	3	3	3	3
Minority Business	1	0	0	0	0	0	0	0	0
Total			81		72		79		88
Ranking		2		2		1		2	
American		**331**	1		1		2		1
Keith & Schnars		320	2		2		1		2
Committee selected both firms for Q & A on 10/16/12 at 10 AM.									
Committee choose to not									
make changes to group scores.									

20120061 Design Crosstown Ext. Manth to US1 10/10/12 @10:00 a.m.

Group Committee Score

American		JA		DB		BM		LS		TOTAL
Criterion	WTG	Points	Total	Points	Total	Points	Total	Points	Total	
Proposer Information	1	2	2	3	3	1	1	3	3	
Org Chart	1	3	3	3	3	3	3	3	3	
Sub Consultant Inf	1	3	3	2	2	1	1	3	3	
Exp on Similar Projects	3	5	15	4	12	2	6	4	12	
Key Individuals	2	5	10	3	6	2	4	5	10	
Location of Work	1	5	5	5	5	4	4	5	5	
Project Approach	5	5	25	4	20	4	20	5	25	
Time Commitment & Schedule	5	5	25	4	20	4	20	4	20	
Pre-proposal meeting	1	5	5	5	5	5	5	5	5	
P-Card	1	3	3	3	3	3	3	3	3	
Minority Business	1	0	0	0	0	0	0	0	0	
Total			96		79		67		89	331
Ranking		1		1		2		1		

Keith & Schnars		JA		DB		BM		LS		
Criterion	WTG	Points	Total	Points	Total	Points	Total	Points	Total	
Proposer Information	1	3	3	3	3	3	3	2	2	
Org Chart	1	4	4	3	3	3	3	4	4	
Sub Consultant Inf	1	2	2	3	3	3	3	2	2	
Exp on Similar Projects	3	4	12	3	9	4	12	5	15	
Key Individuals	2	4	8	3	6	4	8	4	8	
Location of Work	1	4	4	5	5	2	2	4	4	
Project Approach	5	4	20	3	15	4	20	4	20	
Time Commitment & Schedule	5	4	20	4	20	4	20	5	25	
Pre-proposal meeting	1	5	5	5	5	5	5	5	5	
P-Card	1	3	3	3	3	3	3	3	3	
Minority Business	1	0	0	0	0	0	0	0	0	
Total			81		72		79		88	320
Ranking		2		2		1		2		
American		**331**	1		1		2		1	
Keith & Schnars		320	2		2		1		2	

Committee selected both firms for Q & A on 10/16/12 at 10 AM.

Committee choose to not make changes to group scores.

Q & A ATTENDANCE
RFP #20120061
Design Crosstown Manth to US 1
October 16, 2011 @ 10:00:00 AM

	Name (Please PRINT Legibly)	Company Name Or Entity
1	Cheryl Shanaberger	City of PSL-OMB
2	CHRIS JACKSON	RS&H (K&S)
3	Michael Davis	K&S
4	FRED KAUB	GFA
5	CORIANN SALAS	K+S
6	Joyce Howland	K&S
7	Barbara Russell	K&S
8	Bryan Wilson	K&J
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Q & A ATTENDANCE
RFP #20120061
Design Crosstown Manth to US 1
October 16, 2011 @ 10:00:00 AM

1	Cheryl Shanaberger	City of PSL-OMB
2	Vickie Smith	"
3	Matt Hauck	City of PSL - OMB
4	Barb Tempering	C & T
5	Michael T. Kovodzieczyk	C & T
6	Rhett Keene	Cartec
7	Joe Carra	Cartec
8	Etienne Bourgeosie	Cartec
9	Scott Korpi	American
10	Anna Peterfreund	American
11	Ken Jackson	Kimley-Horn
12	Tom Farmer	Kimley-Horn
13	Dan Wallack	Arbaman
14	Bill Adams	American
15	BRIAN MIRSON	AMERICAN
16	Chris O'Reilly	American
17	Denise Burton	City of PSL
18	Laney Southerly	PSL Utility Systems
19	Jim Angstadt	PSL Public Works
20	Brad Macek	PSL USD
21		
22		
23		
24		
25		
26		

Evaluation ATTENDANCE
RFP #20120061
Design Crosstown
October 10, 2012 @ 10:00:00 a.m.

8.	Michael Davis	Keith & Schnars		T
				F
9.	Bryan Wilson	Keith & Schnars		T
				F
10.	Coriann Salas	Keith & Schnars		T
				F
11.	Joe Capra	CAPTEC		T
				F
12.	Brad Macek	PSLUSD		T
				F

Evaluation ATTENDANCE
RFP #20120061
Design Crosstown
October 10, 2012 @ 10:00:00 a.m.

	Name (Please PRINT legibly)	Agency	E-Mail Address	Telephone # & FAX #
1.	Cheryl Sharabegg	City PSL		T F
2.	Chris O'Reilly	America.		T F
3.	STEFAN MATTHES	CH T		T F
4.	Jason Matson	Kimley-Horn		T F
5.	JIM ANGSTADT	CITY OF PSL PW		T F
6.	Denise Burton	City of PSL Engr.		T F
7.	LANEY SOUTHERLY	PSL Utility Systems		T F

RFP # 20120061 Title: Design Crosstown Manth to US 1

Respondent: AMERICAN CONSULTING ENGINEERS OF F

A Criterion	B Weight Factor	C Maximum Points Independent Review	D Maximum Points Review with Panel
A. Proposer Information	1	0 1 (2) 3	0 1 2 3
Comments:			
B. Organization Chart	1	0 1 2 (3) 4	0 1 2 3 4
Comments:			
C. Sub consultant Information	1	0 1 2 (3)	0 1 2 3
Comments:			
D. Experience on Similar Projects	3	0 1 2 3 4 (5)	0 1 2 3 4 5
Comments:			
E. Key Individuals	2	0 1 2 3 4 (5)	0 1 2 3 4 5
Comments:			
F. Location of Work	1	0 1 2 3 4 (5)	0 1 2 3 4 5
Comments:			
G. Project Approach	5	0 1 2 3 4 (5)	0 1 2 3 4 5
Comments:			
H. Time Commitment & Schedule	5	0 1 2 3 4 (5)	0 1 2 3 4 5

Instructions to Evaluator: Review Instruction sheet. Complete a separate evaluation form for each proposal reviewed. Each criterion must be assigned a score unless you are instructed otherwise on the form. Make additional notes in the "Comments" section for reference and discussion during meetings of the full evaluation panel.

The point values entered above reflect my best independent judgement of the merits of the identified respondent's proposal.

Committee Member: JAMES E. ANGSTADT (please print) Dept.: PUBLIC WORKS

Signature: James E. Angstadt Date: 10/10/12

RFP # 20120061 Title: Design Crosstown Manth to US 1

Respondent: KEITH AND SCHNARS, P.A.

A Criterion	B Weight Factor	C Maximum Points Independent Review	D Maximum Points Review with Panel
A. Proposer Information	1	0 1 2 (3)	0 1 2 3
Comments:			
B. Organization Chart	1	0 1 2 3 (4)	0 1 2 3 4
Comments:			
C. Sub consultant Information	1	0 1 (2) 3	0 1 2 3
Comments:			
D. Experience on Similar Projects	3	0 1 2 3 (4) 5	0 1 2 3 4 5
Comments:			
E. Key Individuals	2	0 1 2 3 (4) 5	0 1 2 3 4 5
Comments:			
F. Location of Work	1	0 1 2 3 (4) 5	0 1 2 3 4 5
Comments:			
G. Project Approach	5	0 1 2 3 (4) 5	0 1 2 3 4 5
Comments:			
H. Time Commitment & Schedule	5	0 1 2 3 (4) 5	0 1 2 3 4 5

Instructions to Evaluator: Review Instruction sheet. Complete a separate evaluation form for each proposal reviewed. Each criterion must be assigned a score unless you are instructed otherwise on the form. Make additional notes in the "Comments" section for reference and discussion during meetings of the full evaluation panel.

The point values entered above reflect my best independent judgement of the merits of the identified respondent's proposal.

Committee Member: JAMES E. ANGSTADT (please print) Dept.: PUBLIC WORKS

Signature: James E. Angstadt Date: 10/10/12

RFP 2012061 Design Crowwtown Ext. Manth to US 1 — 10/10/12 @ 10

Evaluation Commitee Individual

Scores

												TOTAL	Rank
American		JA		PB		DB		BM		LS			
Criterion	WTG	Points	Total	Points	Total	Points	Total	Points	Total	Points	Total		
Proposer Information	1	2	2		0	3	3	1	1	3	3		
Org Chart	1	3	3		0	3	3	3	3	3	3		
Sub Consultant Inf	1	3	3		0	2	2	1	1	3	3		
Exp on Similar Projects	3	5	15		0	4	12	2	6	4	12		
Key Individuals	2	5	10		0	3	6	2	4	5	10		
Location of Work	1	5	5		0	5	5	4	4	5	5		
Project Approach	5	5	25		0	4	20	4	20	5	25		
Time Commitment & Schedule	5	5	25		0	4	20	4	20	4	20		
Pre-proposal meeting	1	5	5	5	5	5	5	5	5	5	5		
P-Card	1	3	3	3	3	3	3	3	3	3	3		
Minority Business	1	0	0	0	0	0	0	0	0	0	0		
Total			96		8		79		67		89	339	331
Ranking		1				1		2		1			
Keith & Schnars		JA		PB		DB		BM		LS			
Criterion	WTG	Points	Total	Points	Total	Points	Total	Points	Total	Points	Total		
Proposer Information	1	3	3		0	3	3	3	3	2	2		
Org Chart	1	4	4		0	3	3	3	3	4	4		
Sub Consultant Inf	1	2	2		0	3	3	3	3	2	2		
Exp on Similar Projects	3	4	12		0	3	9	4	12	5	15		
Key Individuals	2	4	8		0	3	6	4	8	4	8		
Location of Work	1	4	4		0	5	5	2	2	4	4		
Project Approach	5	4	20		0	3	15	4	20	4	20		
Time Commitment & Schedule	5	4	20		0	4	20	4	20	5	25		
Pre-proposal meeting	1	5	5	5	5	5	5	5	5	5	5		
P-Card	1	3	3	3	3	3	3	3	3	3	3		
Minority Business	1	0	0	0	0	0	0	0	0	0	0		
Total			81		8		72		79		88	328	320
Ranking		2				2		1		2			
American		**339**	1				1		2		1		
Keith & Schnars		328	2				2		1		2		
Committee selected both firms for Q & A on 10/16/12 at 10 AM.													
		339											
		0											
		####											

RFP # 20120061 Title: Design Crosstown Manth to US 1

Respondent: American Consulting Engineers of FL

A Criterion	B Weight Factor	C Maximum Points Independent Review	D Maximum Points Review with Panel
A. Proposer Information	1	0 (1) 2 3	0 1 2 3
Comments:			
B. Organization Chart	1	0 1 2 (3) 4	0 1 2 3 4
Comments:			
C. Sub consultant Information	1	0 (1) 2 3	0 1 2 3
Comments:			
D. Experience on Similar Projects	3	0 1 (2) 3 4 5	0 1 2 3 4 5
Comments:			
E. Key Individuals	2	0 1 (2) 3 4 5	0 1 2 3 4 5
Comments:			
F. Location of Work	1	0 1 2 3 (4) 5	0 1 2 3 4 5
Comments:			
G. Project Approach	5	0 1 2 3 (4) 5	0 1 2 3 4 5
Comments:			
H. Time Commitment & Schedule	5	0 1 2 3 (4) 5	0 1 2 3 4 5

Instructions to Evaluator: Review Instruction sheet. Complete a separate evaluation form for each proposal reviewed. Each criterion must be assigned a score unless you are instructed otherwise on the form. Make additional notes in the "Comments" section for reference and discussion during meetings of the full evaluation panel.

The point values entered above reflect my best independent judgement of the merits of the identified respondent's proposal.

Committee Member: Brad Mueck (*please print*) Dept.: Utility

Signature: [signature] Date: 10-10-12

RFP # 20120061 Title: Design Crosstown Manth to US 1

Respondent: Keith and Schnars

A Criterion	B Weight Factor	C Maximum Points Independent Review	D Maximum Points Review with Panel
A. Proposer Information	1	0 1 2(3)	0 1 2 3
Comments:			
B. Organization Chart	1	0 1 2(3) 4	0 1 2 3 4
Comments:			
C. Sub consultant Information	1	0 1 2(3)	0 1 2 3
Comments:			
D. Experience on Similar Projects	3	0 1 2 3(4) 5	0 1 2 3 4 5
Comments:			
E. Key Individuals	2	0 1 2 3(4) 5	0 1 2 3 4 5
Comments:			
F. Location of Work	1	0 1(2) 3 4 5	0 1 2 3 4 5
Comments:			
G. Project Approach	5	0 1 2 3(4) 5	0 1 2 3 4 5
Comments:			
H. Time Commitment & Schedule	5	0 1 2 3(4) 5	0 1 2 3 4 5

Instructions to Evaluator: Review Instruction sheet. Complete a separate evaluation form for each proposal reviewed. Each criterion must be assigned a score unless you are instructed otherwise on the form. Make additional notes in the "Comments" section for reference and discussion during meetings of the full evaluation panel.

The point values entered above reflect my best independent judgement of the merits of the identified respondent's proposal.

Committee Member: Brad Macek (*please print*) Dept.: Utility

Signature: [signature] Date: 10-10-12

RFP # 20120061 Title: Design Crosstown Manth to US 1

Respondent: Keith and Schnars

A Criterion	B Weight Factor	C Maximum Points Independent Review	D Maximum Points Review with Panel	
A. Proposer Information	1	0 1 2 (3)	0 1 2 3	3
Comments: multidisciple consulting / Diversified client base / cost conscious				
B. Organization Chart	1	0 1 2 (3) 4	0 1 2 3 4	3
Comments: Like bridge pier reviews / main K+S employees				
C. Sub consultant Information	1	0 1 2 (3)	0 1 2 3	3
Comments: FOUT qualifications. RSH bridge consultations.				
D. Experience on Similar Projects	3	0 1 2 (3) 4 5	0 1 2 3 4 5	9
Comments: substructure design only not over sensitive water Hilliard Nassau				
E. Key Individuals	2	0 1 2 (3) 4 5	0 1 2 3 4 5	6
Comments: 80% Project manager → Crosstown 195 / Becker Rd / Bridge at CSX Both Lead structural engineer. conceptual				
F. Location of Work	1	0 1 2 3 4 (5)	0 1 2 3 4 5	5
Comments: Have a local office				
G. Project Approach	5	0 1 2 (3) 4 5	0 1 2 3 4 5	15
Comments: no discussion on DB. / Discussed methods of construction 80 Ft spans FIB36. Drainage issues. PDE experience:				
H. Time Commitment & Schedule	5	0 1 2 3 (4) 5	0 1 2 3 4 5	20
Adequate; Did not schedule out past Jan 2015 Address some savings				
				(44)

Instructions to Evaluator: Review Instruction sheet. Complete a separate evaluation form for each proposal reviewed. Each criterion must be assigned a score unless you are instructed otherwise on the form. Make additional notes in the "Comments" section for reference and discussion during meetings of the full evaluation panel.

The point values entered above reflect my best independent judgement of the merits of the identified respondent's proposal.

Committee Member: Denise Burton (*please print*) Dept.: Engr

Signature: DBurton Date: 10/10/2012

Phase I: the preparation and completion of the topographic and control survey for the proposed roadway + R/W

RFP # 20120061 Title: Design Crosstown Manth to US 1

Respondent: American Consulting Engineers

A	B	C	D	
Criterion	**Weight Factor**	**Maximum Points Independent Review**	**Maximum Points Review with Panel**	
A. Proposer Information	1	0 1 2 (3)	0 1 2 3	3
Comments: worked on various projects				
B. Organization Chart	1	0 1 2 (3) 4	0 1 2 3 4	3
Comments: QA/QC - Am Good descriptions of job duties PD - Am				
C. Sub consultant Information	1	0 1 (2) 3	0 1 2 3	2
Comments: not sure what tasks each will do, 2 geotechs, etc survey info				
D. Experience on Similar Projects	3	0 1 2 3 (4) 5	0 1 2 3 4 5	12
Comments: more bridge projects drainage				
E. Key Individuals	2	0 1 2 (3) 4 5	0 1 2 3 4 5	6
Comments: Bridge - PDE study Crosstown Turnpike survey Lyons L30. I95 - no sensitive water				
F. Location of Work	1	0 1 2 3 4 (5)	0 1 2 3 4 5	5
Comments: local				
G. Project Approach	5	0 1 2 3 (4) 5	0 1 2 3 4 5	20
Comments: Developed DE element well Described construction methods well				
H. Time Commitment & Schedule	5	0 1 2 3 (4) 5	0 1 2 3 4 5	20
Good time line shown.				
				(71)

Instructions to Evaluator: Review Instruction sheet. Complete a separate evaluation form for each proposal reviewed. Each criterion must be assigned a score unless you are instructed otherwise on the form. Make additional notes in the "Comments" section for reference and discussion during meetings of the full evaluation panel.

The point values entered above reflect my best independent judgement of the merits of the identified respondent's proposal.

Committee Member: Denise Burton (*please print*) Dept.: Engr.

Signature: [signature] Date: 10/10/2012

Phase I: the preparation and completion of the topographic and control survey for the proposed roadway + row

City of Port St. Lucie, Florida

PARTICIPATION AGREEMENT
Request for Proposal #20120061
Evaluation Committee Members / Participants

I, _____, an individual official, employee, consultant, or subcontractor of or to the CITY OF PORT ST. LUCIE, FLORIDA hereby consent to the terms in this Agreement in consideration of my serving as an evaluation committee member (scoring or non-scoring) and being provided certain information related to Professional Engineering Design Services for Crosstown Parkway Extension from Manth to US 1.

Initials	**Applicability of the Florida Sunshine Law**

I acknowledge I have been informed and am aware the State of Florida Sunshine Law applies to meetings of the evaluation committee where decisions for recommendations to the City Council apply. I further recognize that discussions between committee members outside of public Evaluation Committee meetings is prohibited and in violation of the State of Florida Sunshine Law. All questions by evaluation committee members shall be directed to the Contract Administrator (OMB).

Initials	**Restricted Communications / Cone of Silence**

I acknowledge that to insure the proper and fair evaluation of a submittal, the City of Port St. Lucie prohibits any communication between any City employee, representative or official other than the Contract Administrator (OMB) prior to the time of award by City Council has been made. Communication between Respondent and the City will be initiated and coordinated by the Contract Administrator (OMB) in order to obtain information or clarification needed to develop a proper and accurate evaluation of the proposal.

Communication related to this RFP is further restricted with any entity outside the City of Port St. Lucie. Including, but not limited to, sub-contractors of prime respondents, companies in the industry, other agencies or utility entities, etc . . .

Initials	**Release or Distribution of Information and/or Material**

Evaluation committee members have been provided vendor responses either in hard copy or electronic format. This information, hard copy or electronic, is NOT to be reproduced or distributed under any circumstance. Some information within the proposals may be proprietary and/or confidential. Release of any information will be coordinated by OMB only.

Initials	Non-Collusion

I acknowledge the following with regards to non-collusion in the evaluation process and my scoring:

1. The scores assigned in my evaluation have been arrived at independently and without consultation, communication or agreement with any other Evaluator other than those discussions taking place in a meeting of the Evaluation Committee meeting arranged by OMB.

2. That my scoring of each proposal has not been disclosed to any other Evaluator or person, and they will not be disclosed to other Evaluator except by the OMB during a meeting of the Evaluation Committee.

3. No attempt has been made or will be made to coerce or affect the scoring of any Evaluator.

Signature: _____

Printed: Brad Macek

Date: 10-11-12

City of Port St. Lucie, Florida

PARTICIPATION AGREEMENT
Request for Proposal #20120061
Evaluation Committee Members / Participants

I, Denise Burton, an individual official, employee, consultant, or subcontractor of or to the CITY OF PORT ST. LUCIE, FLORIDA hereby consent to the terms in this Agreement in consideration of my serving as an evaluation committee member (scoring or non-scoring) and being provided certain information related to Professional Engineering Design Services for Crosstown Parkway Extension from Manth to US 1.

Initials	**Applicability of the Florida Sunshine Law**

I acknowledge I have been informed and am aware the State of Florida Sunshine Law applies to meetings of the evaluation committee where decisions for recommendations to the City Council apply. I further recognize that discussions between committee members outside of public Evaluation Committee meetings is prohibited and in violation of the State of Florida Sunshine Law. All questions by evaluation committee members shall be directed to the Contract Administrator (OMB).

Initials	**Restricted Communications / Cone of Silence**

I acknowledge that to insure the proper and fair evaluation of a submittal, the City of Port St. Lucie prohibits any communication between any City employee, representative or official other than the Contract Administrator (OMB) prior to the time of award by City Council has been made. Communication between Respondent and the City will be initiated and coordinated by the Contract Administrator (OMB) in order to obtain information or clarification needed to develop a proper and accurate evaluation of the proposal.

Communication related to this RFP is further restricted with any entity outside the City of Port St. Lucie. Including, but not limited to, sub-contractors of prime respondents, companies in the industry, other agencies or utility entities, etc . . .

Initials	**Release or Distribution of Information and/or Material**

Evaluation committee members have been provided vendor responses either in hard copy or electronic format. This information, hard copy or electronic, is NOT to be reproduced or distributed under any circumstance. Some information within the proposals may be proprietary and/or confidential. Release of any information will be coordinated by OMB only.

Initials LS	**Non-Collusion**

I acknowledge the following with regards to non-collusion in the evaluation process and my scoring:

1. The scores assigned in my evaluation have been arrived at independently and without consultation, communication or agreement with any other Evaluator other than those discussions taking place in a meeting of the Evaluation Committee meeting arranged by OMB.

2. That my scoring of each proposal has not been disclosed to any other Evaluator or person, and they will not be disclosed to other Evaluator except by the OMB during a meeting of the Evaluation Committee.

3. No attempt has been made or will be made to coerce or affect the scoring of any Evaluator.

Signature: _____

Printed: Laney Southerly

Date: 10/10/2012

City of Port St. Lucie, Florida

PARTICIPATION AGREEMENT
Request for Proposal #20120061
Evaluation Committee Members / Participants

I, JAMES E. ANGSTADT, an individual official, employee, consultant, or subcontractor of or to the CITY OF PORT ST. LUCIE, FLORIDA hereby consent to the terms in this Agreement in consideration of my serving as an evaluation committee member (scoring or non-scoring) and being provided certain information related to Professional Engineering Design Services for Crosstown Parkway Extension from Manth to US 1.

Initials JEA	**Applicability of the Florida Sunshine Law**

I acknowledge I have been informed and am aware the State of Florida Sunshine Law applies to meetings of the evaluation committee where decisions for recommendations to the City Council apply. I further recognize that discussions between committee members outside of public Evaluation Committee meetings is prohibited and in violation of the State of Florida Sunshine Law. All questions by evaluation committee members shall be directed to the Contract Administrator (OMB).

Initials JEA	**Restricted Communications / Cone of Silence**

I acknowledge that to insure the proper and fair evaluation of a submittal, the City of Port St. Lucie prohibits any communication between any City employee, representative or official other than the Contract Administrator (OMB) prior to the time of award by City Council has been made. Communication between Respondent and the City will be initiated and coordinated by the Contract Administrator (OMB) in order to obtain information or clarification needed to develop a proper and accurate evaluation of the proposal.

Communication related to this RFP is further restricted with any entity outside the City of Port St. Lucie. Including, but not limited to, sub-contractors of prime respondents, companies in the industry, other agencies or utility entities, etc . . .

Initials JEA	**Release or Distribution of Information and/or Material**

Evaluation committee members have been provided vendor responses either in hard copy or electronic format. This information, hard copy or electronic, is NOT to be reproduced or distributed under any circumstance. Some information within the proposals may be proprietary and/or confidential. Release of any information will be coordinated by OMB only.

Initials JEA	**Non-Collusion**

I acknowledge the following with regards to non-collusion in the evaluation process and my scoring:

1. The scores assigned in my evaluation have been arrived at independently and without consultation, communication or agreement with any other Evaluator other than those discussions taking place in a meeting of the Evaluation Committee meeting arranged by OMB.

2. That my scoring of each proposal has not been disclosed to any other Evaluator or person, and they will not be disclosed to other Evaluator except by the OMB during a meeting of the Evaluation Committee.

3. No attempt has been made or will be made to coerce or affect the scoring of any Evaluator.

Signature: James E. Angstadt

Printed: JAMES E. ANGSTADT

Date: 10/10/12

Why didn't they enter a submittal?

BCC Engineering Inc. - 305.670.2350
They do not have a PSL office.
One requirement was they would have to be local - They don't do surveys -
The ~~could~~ designer would not be able to put forth input. - So various reasons.

Erdman Anthony of Florida, Inc. 561.753.9723

They heard through grapevine that it was already slotted for a particular firm & after reading through - they didn't feel they would be a strong competitor.

Target Engineering Group, Inc. 305.436.8877

It is design and they only do inspection.

The R-R-M Professional Group, Inc. 904.731.5440

Brian - he is checking into this and called back needed an office in the city of PSL the term of the contract doesn't have an office in PSL

URS Corporation 305. 884. 8900

Wantman Group, Inc. 561. 687. 2220
Survey effort up front & then
Were told design would come
later. It was just
a matter where they
should put their efforts
and decided they may
not be getting "the
bang for the buck".

User: Shanaberger, CPPO, Cheryl Organization: City of Port St. Lucie - Office of Management and Budget Logout | Help

DEMANDSTAR by ONVIA

My DemandStar Buyers Account Info

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Planholders List

Member Name City of Port St. Lucie - Office of Management and Budget

Bid Number ERFP-200120061-0-2012/CS

Bid Name Professional Engineering Design Services for Crosstown Parkway Extension Manth to US1 Financial Project ID(S). 410844-1-A8-01 Federal Project No. 7777-087

5 Document(s) found for this bid

59 Planholder(s) found.

Add Planholder

Supplier Name	Phone	Fax	Doc Count	Attributes	Programs	Actions
AMEC	3523323318	3523336622	1			Documents
American Consulting Engineers of Florida, LLC	8134352600	8134352601	5		1. Master Environmental Eng	Documents
Andersen Andre Consulting Engineers, Inc.	7728079191	7728079192	4		1. Geotechnical Master	Documents
Ardaman and Associates,Inc.	7728780072	7728780097	3		1. Geotechnical Master	Documents
BCC Engineering, Inc.	3056702350	3056702351	5	1. Hispanic Owned 2. Small Business		Documents
Bowyer-Singleton & Associates, Inc.	4078435120	4074812841	2			Documents
Bridge Design Associates, Inc.	5616863660	5617911995	4			Documents
Calvin, Giordano & Associates, Inc.	9549217781	9549218807	4		1. Construction Engineering Inspections	Documents
CAPTEC Engineering, Inc.	7726924344	7726924341	5	1. Small Business	1. Construction Engineering Inspections 2. Design Master	Documents
Cardno TBE	8008618314	7274311785	4			Documents

Page 1 of 6 first | previous | next | last

Format for Printing Yes

Search << Return Export to Excel

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Member Name City of Port St. Lucie - Office of Management and Budget

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5 Document(s) found for this bid

59 Planholder(s) found.

Add Planholder

Supplier Name	Phone	Fax	Doc Count	Attributes	Programs	Actions
Culpepper & Terpening Inc	7724643537	7724649497	3		1. Construction Engineering Inspections 2. Design Master	Documents
DRMP, Inc.	4078960594	4078964836	4			Documents
Dunkelberger Engineering & Testing, Inc.	5616894299	1111111111	4		1. Geotechnical Master	Documents
Earth Tech	8642342294	8642343069	3			Documents
EarthBalance	9414267878	0000000000	2			Documents
ENTRIX Inc - Southeast	8136644500	8136640440	4			Documents
Erdman Anthony of Florida, Inc.	5617539723	5617539724	5			Documents
F.R. ALEMAN & ASSOCIATES INC	3055918777	3055998749	4			Documents
Infrastructure Engineers	4079571660	4079578744	4	1. Native American Owned	1. Design Master	Documents
Inwood Consulting Engineers Inc	4079718850	4079718955	4			Documents

Page 3 of 6 first | previous | next | last

Format for Printing No

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5 Document(s) found for this bid

59 Planholder(s) found.

Add Planholder

Supplier Name	Phone	Fax	Doc Count	Attributes	Programs	Actions
Stanley Consultants Inc.	5615848704	5616893003	4			Documents
Target Engineering Group, Inc.	3054368877	3054368885	4	1. Asian/Hawaiian Owned	1. Construction Engineering Inspections	Documents
Terracon	4077406110	0000000000	2		1. Geotechnical Master	Documents
THE R-A-M- PROFESSIONAL GROUP, INC.	9047315440	9047315465	4			Documents
Tierra, Inc.	8139891354	8139891355	4	1. Hispanic Owned		Documents
URS Corporation	3058848900	0000000000	5			Documents
Volkert & Associates, Inc.	8138751365	8138747656	4			Documents
Wantman Group, Inc.	5616872220	5616871110	4			Documents
Weidlinger Associates	2123672855	2124972355	4			Documents

Page 6 of 6 first | previous | next | last

Format for Printing No

Search << Return Export to Excel

BID OPENING ATTENDANCE
RFP 20120061
Design Crosstown Ext. Manth to US1
September 5, 2012 @ 9:00:00 a.m.

	Name (Please PRINT legibly)	Agency	E-Mail Address	Telephone # & FAX #
1.	Marcia Feldman	Kimley-Horn and Assoc. Inc.	marcia.feldman@ kimley-horn.com	T 561 845 0665 F 561 863 8175
2.	Joseph DeFronzo	Erdman Anthony	defronzoje erdman anthony.com	T 561 753 9723 F
3.	JACK BREED	CIVILSURV DESIGN GROUP LOCAL DBE/MBE SUBS	JBREED@CIVILSURV.COM	T 772-323-2244 F 772-323-2245
4.	Scott Worack	Civilsurv Design	sworack@civilsurv.com	T 772-323-2244 F 772-323-2245
5.	BILL SMITH	CIVILSURV DESIGN GROUP	WSMITH@CIVILSURV.COM	T 772-323-2244 F 772-325-2245
6.	BRYAN WILSON	KEITH AND SCHNARS.	CBWILSON@KEITHANDSCHNARS.COM	T 954-776-1616 F 954-771-7690
7.	CORIANN SALAS	KEITH AND SCHNARS	CSALAS@KEITHANDSCHNARS.COM	T 954.776.1616 F 954.771.7690

BID OPENING ATTENDANCE
RFP 20120061
Design Crosstown Ext. Manth to US1
September 5, 2012 @ 9:00:00 a.m.

8.	Clyde Cuffy	City of PSL Eng	ccuffy@cityofpsl.com	T 772 871 7643
				F
9.	FRANK KNOTT	CITY OF PSL	FKNOTT@CITYOFPSL.COM	T 772-344-4290
				F
10.	Jason Matson	Kimley-Horn	jason.matson@kimley-horn.com	T 772-345-0909
				F
11.	Tony Macaluso	GFA	Tmacaluso@TeamGFA.com	T 772-924-3575
				F
12.	Douglas Norris	Jacobs Eng.	douglas.norris@jacobs.com	T 954-621-5512
				F

BID OPENING ATTENDANCE
RFP 20120061
Design Crosstown Ext. Manth to US1
September 5, 2012 @ 9:00:00 a.m.

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
13.	Nate Willbur	Infrastructure Engineers	nwillbur@go-ei.com	T 352-262-4051
				F
14.	Joe Carra	CAPTEC	JCARRA@goCAPTEC.com	T 772-692-4344
				F
15.	Richard Bussell	Miller Legg	[redacted]Bussell@millerlegg	T 772 708 7294
				F
16.	Michael T. Kolodziejczyk	Culpepper & Terpening	MKOLO@ct-eng.com	T 772-464-3537
				F 772-464-4497
17.	Patricia Rochling	City of PSL	pat@cityofpsl.com	T 772-871-5175
				F 772-871-5289
18.				T
				F
19.				T
				F

BID OPENING ATTENDANCE
RFP 20120061
Design Crosstown Ext. Manth to US1
September 5, 2012 @ 9:00:00 a.m.

	Name (Please PRINT legibly)	Agency	E-Mail Address	Telephone # & FAX #
1.	BRIAN MIRSON	AMERICAN	bmirson@acp-fl.com	T 561-307-0069 F
2.	MAJ ACAM	C3TS	MAJHARA@C3TS.COM	T 561-487-3379 F 561-487-3466
3.	PATRICK LEUNG	C3TS	PatrickL@C3TS.com	T 561-487-3379 F 561-487-3466
4.	David Andre	MACE	DAndre@MACEinc.com	T 772-807-9191 F 772-807-9192
5.	CRIS BETANCOURT	CHEN MOORE	CBETANCOURT@CHENMOORE.com	T 772-486-9256 F
6.	WILL SUERO	MDR	WILL_SUERO2MDRINC.com	T 954-668-5223 F
7.	Dan Zrallack	Ardaman	dzrallack@ardaman.com	T 772-878-0072 F

BID OPENING ATTENDANCE
RFP 20120061
Design Crosstown Ext. Manth to US1
September 5, 2012 @ 9:00:00 a.m.

8.	Ken Jackson	Kimley-Horn	ken.jackson@kimley-horn.com	T 561-845-0665
				F
9.	Roxanne Chesser	City of PSL	roxannec@cityofpsl.com	T 772/871-5186
				F
10.				T
				F
11.				T
				F
12.				T
				F

INVITATION TO BID

Request for Proposal # 20120061 for Professional Engineering Design Services for Crosstown Parkway Extension Manth to US1 will be received electronically by the City of Port St. Lucie, in the Office of Management & Budget, 3rd Floor, Suite 390, Bldg "A" of the Municipal Complex located at 121 SW Port St. Lucie Blvd., Port St. Lucie, FL 34984-5099, until 3:00:00 p.m. on September 18, 2012. A pre-bid conference will be held starting at 9 a.m. on September 5, 2012 in the Training room Building B, Municipal Complex. Specifications may be obtained from DemandStar by Onvia, telephone (800) 711-1712, or from the Office of Management and Budget. Bid packages received from any other source is at vendor's risk.

Billing for this advertisement must be sent to:

City of Port St. Lucie
Office of Management & Budget
121 SW Port St. Lucie Boulevard, Building "A"
Port St. Lucie, Florida 34984-5099

This advertisement is to run on August 21, 2012 only.

****

This section for Office of Management & Budget use only.
Advertisement placed by: Cheryl Shanaberger
Telephone #: 772 871 7390 Fax # 772-871-7337 cheryls@cityofpsl.com

(Place and 'x' in the box below for the appropriate newspaper)

Tribune	Date:	Ad
Post	Date:	Ad

Fax to: 600-1450 or
E-mail: stlucielegals@scripps.com

Cheryl Shanaberger

From: Zacharopoulos, Vasi [Gertruida.Zacharopoulos@scripps.com]
Sent: Friday, August 17, 2012 3:19 PM
To: Cheryl Shanaberger
Subject: RE: 20120061 Bid advertisement

WE RECEIVED AND WILL PUBLISH PER YOUR INSTRUCTIONS. WE WILL SEND COPY OF NOTICE WITH COST AND PUB DATE(S) PRIOR TO PUBLICATION.

Vasi Zacharopoulos
Classified Legal Advertising/ St. Lucie County
Scripps Treasure Coast Newspapers
www.TCPalm.com/legalinfo
1939 S Federal Hwy, Stuart, FL 34994
E-mail: gertruida.zacharopoulos@scripps.com
772-692-8966 (direct) 772-600-1450 (fax)
Please send all notices to stlucielegals@scripps.com

PLEASE NOTE: Deadline to place a legal notice (not including NOS) is 3:00pm - 4 BUSINESS DAYS (Mon - Fri) prior to publication (EARLIER PRIOR TO A HOLIDAY)
****Deadline to submit any corrections is 2:30 pm 2 business days prior to pub; 11:30 am on Friday for Monday**

From: Cheryl Shanaberger [mailto:CherylS@cityofpsl.com]
Sent: Friday, August 17, 2012 3:17 PM
To: TCNStLucieLegals
Subject: 20120061 Bid advertisement

Please send confirmation. Thanks

Cheryl Shanaberger, MPA, CPPO
Deputy Director OMB
772 871 7390

Scripps Treasure Coast Newspapers

News/Press-Tribune • Jupiter Courier • Sebastian Sun

Publication Date: 08/21/2012

Ad Number:	2431623	Client Name:	/ PO# #20120061
Insertion Number:		Advertiser:	CITY OF PORT ST LUCIE
Size:	1 x 54	Section/Page/Zone:	S/S02/St Lucie News Tribune
Color Type:	B&W	Description:	INVITATION TO BIDReq

NOTICE OF FORECLOSURE

NOTICE OF ADMINISTRATION

NOTICE OF SALE

REQUEST FOR BID — INVITATION TO BID

IN THE CIRCUIT COURT OF THE NINETEENTH JUDICIAL CIRCUIT, IN AND FOR ST. LUCIE COUNTY, FLORIDA
CIVIL DIVISION

NATIONAL FAMILY OPPORTUNITY FUND II, LLLP, a Delaware limited liability limited partnership, Plaintiff, vs. PHILIP J. VON KAHLE, not individually, but solely in his representative capacity as the duly-appointed Assignee for the Benefit of Creditors of the Assignment for the Benefit of Creditors of Midway Development East, Inc., a Florida corporation; and PHILIP J. VON KAHLE, not individually, but solely in his representative capacity as the duly-appointed Assignee for the Benefit of Creditors of the Assignment for the Benefit of Creditors of Midway 100 East, LLC, a Florida limited liability company, Defendants.

NOTICE OF SALE

EXHIBIT "A" REAL PROPERTY LEGAL DESCRIPTION

EXHIBIT "B" PERSONAL PROPERTY DESCRIPTION

Bid Details

Bid Information

EDIT

Agency	City of Port St. Lucie - Office of Management and Budget
Bid Type	Electronic Request for Proposal
Bid Number	ERFP-200120061-0-2012/CS
Fiscal Year	2012
Bid Writer	**Cheryl Shanaberger, CPPO**
Bid Name	Professional Engineering Design Services for Crosstown Parkway Extension Manth to US1 Financial Project ID(S). 410844-1-A8-01 Federal Project No. 7777-087
Bid Status	Under Evaluation
Bid Status Text	None
Award To	
Due Date/Time	9/18/2012 3:00 PM Eastern
Broadcast Date	8/17/2012
Bid Bond	
Project Estimated Budget	
Plan (blueprint) Distribution Options	None
Distribution Method	Download and Mail
Distributed By	Onvia DemandStar
Distribution Notes	None
Scope of Work	The extension of the Crosstown Parkway to US Highway 1 is a 6-lane transportation facility consisting of, approximately, a one-mile of road section and a one-mile bridge span over the North Fork of the St Lucie River. This project shall be completed as required by the Florida Department of Transportation (FDOT), Federal Highway Administration (FHWA), and City criteria. The work for this project is to be completed in four (4) phases. Any or all of the phases may be divided into segments at the discretion of the City. At this time, only Phase I will be authorized. Subsequent phases are not guaranteed and are subject to the discretion of the City. The Engineer shall not begin work on a phase until he has received written authorization by the City to begin the work. Work completed prior to authorization from the City will not be eligible for compensation. The work for this project shall include the following phases: • Phase 1 –the preparation and completion of the topographic and control survey for the proposed roadway and right -of-way mapping • Phase 2 - the preparation and completion of the 30% design documents using either: o Option 1- conventional Design Method o Option 2 Construction Management at Risk • Phase 3 - the preparation and completion of the 59% design documents using either: o Option 1- conventional Design Method o Option 2 Construction Management at Risk • Phase 4 - one of the following options: o Option 1 – Prepare and submit permit applications and complete the design documents, or o Option 2 – Prepare a design/build criteria package and assist the City in the selection of a firm to complete the design, permitting and construction of the project. Work Prior to the issuance of the FHWA ROD is paid exclusively from City funds. Federal, State, and/or City funds will be used to fund the work effort after the FHWA ROD is issued. At this time, only Phase 1 will be authorized. Subsequent phases are not guaranteed and are subject to the discretion of the City. Due to the nature of the work, the successful Engineer shall establish and work from an office within the City of Port

St Lucie for the duration of the project. The successful Engineer for this project will not be eligible to perform Construction Engineering and Inspection Services or Design/Build Services for this project.
The Engineer and all sub-consultants shall be pre-qualified in accordance with Florida Administrative Code Rule 14-75 to perform their respective work tasks to complete the work. A Scope of Services for this project is provided in Attachment A of this Proposal.

E-Bidding Yes

E-Bidding

EDIT

View Supplier Info on Tabulation Sheet prior to bid opening Yes

Required Documents
1. Questionnaire
2. Current Certificate of Insurance
3. Form 330

Legal Ad

VIEW

Please select either the View or Edit button to manage legal ad.

Pre-Bid Conference

Non-Mandatory
September 5, 2012
9:00 AM
City Hall Complex
Building B Training Room
121 SW Port St. Lucie Blvd.
Port St. Lucie, FL 34951

Publications

No Publications Data Found

Documents

EDIT

Bid Package
20120061 Attachment A (82 Pages, Complete)
RFP 20120061 (Complete)
pre-bid attendees (6 Pages, Complete)
Addendum #1 (1 Page, Complete)
Pre-bid minutes (12 Pages, Complete)

Award
Score Sheets (2 Pages, Complete)
Q & A Notice (1 Page, Complete)
Evaluation Meeting minutes (9 Pages, Complete)

Commodity Codes

SRV-918-42 - Engineering Consulting
SRV-925-00 - ENGINEERING SERVICES, PROFESSIONAL
SRV-925-33 - Engineer Services, Professional
SRV-925-36 - Engineering Services (Not Otherwise Classified)

Statistics

Planholders **There are 59 planholders for this bid**

Broadcast List **1562 suppliers have been notified**

Supplemental Suppliers **0 Supplemental Suppliers**

Filtered No

Post-Bid Viewers **22 viewer(s)**

<< Return

AGENDA

Pre-Bid Conference
RFP #20120061
Design Crosstown Ext. Manth to US1
September 5, 2012

1. Sign-In Sheet/ Meeting is being recorded. Only information that is posted in an addendum will become part of the bid documents.

2. Introduction of key personnel

3. **Reminder**: Bid opening date is September 18, 2012 @ 3 PM EST

   No Bid will be accepted after that date and time.

   Any Bid received late will be returned unopened.

   All documents to be submitted in 1 file.

4. Review of Specifications requirements:

5. Turn over to: Public Works

6. Additional questions from Prospective Bidders.

7. Adjourn

BID ADDENDUM # 1
BID # 20120061
Addendum Date: Septermber 5, 2012

Professional Engineering Design Services for Crosstown Parkway Extension Manth to US 1

Please make the following changes/modifications to the subject bid:

Please limit the Questionnaire to 50 pages. The 330 form for the key personnel of your firm and your subs is in addition to the 50 pages of the Questionnaire.

You do not need to submit duplicate information. As per example on page 19 Question # 5, you may use the 330 form for the resumes just state on the questionnaire "see 330 form".

Please submit all documents in one file the format may be of your choosing. PDF is acceptable.

Page 5, fourth paragraph "Due to the nature of the work, the successful Engineer shall establish and work from an office within the City of Port St Lucie for the duration of the project." This office will need to be established before the Notice to Proceed is issued.

The property acquisition contract will be a separate contract and at this time it is still undecided if this will be performed by the City or FDOT.

Phase I includes topographic, control survey and preliminary geotechnical work.

This web site is for additional information concerning Crosstown Parkway:
http://pslcrosstownparkway.com/

The MBE on Page 19 of 20, No.11, only applies if the Prime firm is an MBE.

On page 6 of 20, in the Tentative Schedule, the Q&A scheduled for October 16th may also require a presentation or be just a Q & A. The evaluation committee will make that determination on October 10, 2012.

The "Truth-in-Negotiation Certificate and Affidavit" is not part of the required submittal.

NOTE: The bid opening date is unchanged.

Instructions to Bidder:

Each bidder must acknowledge receipt of any addenda on the Bid Reply Sheet in order to have his/her bid or proposal/bid to be accepted.

"A City for All Ages"

CITY OF PORT ST. LUCIE

Sealed Electronic Proposal #20120061
(E-Bid)

Professional Engineering Design Services for Crosstown Parkway Extension Manth to US1

Financial Project ID(S). 410844-1-A8-01
Federal Project No. 7777-087

Prepared By:
Cheryl Shanaberger
Office of Management & Budget
121 SW Port St. Lucie Boulevard
Port St. Lucie, FL 34984-5099
772-871-7390
cheryls@cityofpsl.com

INVITATION TO E-BID

Sealed Electronic Proposal #20120061 Professional Engineering Design Services for Crosstown Extension from Manth to US1 will be received by the Office of Management and Budget of the City of Port St. Lucie no later than **3:00:00 p.m. on September 18, 2012**. Specifications are attached.

A one time only pre-bid conference for all bidders will be held at the City of Port St. Lucie Building B, City Hall Complex, Training Room at 121 SW Port St. Lucie Blvd., Port St. Lucie, Fl 34951, starting at 9:00 a.m. on September 5, 2012. The purpose of this meeting is to provide a forum for the City to provide a brief overview of the project and to discuss the proposed project, answer questions on the project requirements, instructions for submitting the Proposal, and other relevant issues. Attendance is strongly encouraged as this will be the only forum to ask questions and seek clarification

All submittals must be received by the date and time specified above, when they will be opened and the names publicly read aloud. The proposal time must be and shall be scrupulously observed. Under no circumstances shall submittals uploaded to Demandstar.com after the time specified be accepted or considered. It is the sole responsibility of the Proposer to ensure that his or her submittal is uploaded on or before the closing date and time. The City shall in no way be responsible for delays caused by any power outages or internet failures. No exceptions will be made.

Electronic replies will be the **only** method allowed for Bidders to respond to this solicitation. All submittals must be compatible with Microsoft Office 2003. All submittals must be contained as one file and in the order specified on page 5. E-Bidding will be done through a secure locked box. Bidders can only view/submit their E-Bid and will not have access to any other Bidder's submittals. The Bidder's E-Bid may be changed at the Bidder's discretion until the due date and time have been reached at which time the Bidder will no longer change or have access to the electronic bid submittal. The City will then open the E-Bids. Bidders who are e-bidding for the first time are strongly encouraged to contact Demandstar at (800) 771-1712 or obtain assistance by e-mailing questions to supplierservices@onvia.com.

The City of Port St. Lucie reserves the right to reject any and all bids, to waive any and all informalities or irregularities, and to accept or reject all or any part of any bid as it may deem to be in the best interest of the citizens of the City.

For the purpose of this bid, the term Bidder, E-Bidder, Proposer and Engineer may be used interchangeably.

Documents required for this E-Bid:
Competed Questionnaire
Form 330
Certified Minority Business Certificate (if applies)
W-9
Insurance

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ATTACHMENT A
Scope of Services for
Financial Project ID 410844-1-A8-01 and
Federal Project Number 7777-087-A ..... A1 to A82

OVERVIEW

Pursuant to the Consultant's Competitive Negotiations Act of 1973, Section 287.055, Florida Statutes, the City Council of the City of Port St. Lucie, Florida solicits proposals from qualified professional design engineers registered to practice in the State of Florida for Professional Engineering Design Services for the Crosstown Extension from Manth to US1.

The Crosstown Parkway Extension is in the final stages of the National Environmental Policy Act permitting process. A Draft Environmental Impact Statement was approved by the Federal Highway Administration (FHWA) on July 1, 2011 and the City Council designated Alternative 1C as the Locally Preferred Alternative on January 23, 2012. The City is working towards a Final Record of Decision (ROD) from FHWA at the end of 2012 or beginning of 2013. In anticipation of the ROD, the City desires to expedite the schedule and fund the work to move forward with the initial engineering and design work for Alternative 1C.

The extension of the Crosstown Parkway to US Highway 1 is a 6-lane transportation facility consisting of, approximately, a one-mile of road section and a one-mile bridge span over the North Fork of the St Lucie River. This project shall be completed as required by the Florida Department of Transportation (FDOT), Federal Highway Administration (FHWA), and City criteria.

NOTE: The City may not accept proposals from firms, that have had adversarial relationships with the City or firms that have represented entities that have had adversarial relationships with the City. This includes the firm, employees and financial or legal interests.

The City will not enter into a contract or conduct business with any firm or any personnel that is listed on the Federal, State, or other local government agencies' Excluded Parties List, Suspended List or Debarment List.

SCOPE OF WORK

Please refer to Attachment A, *Draft Scope of Services for Financial Project ID 410844-1-A8-01 Federal Project Number 7777-087-A,* of this Proposal.

The work for this project is to be completed in four (4) phases. Any or all of the phases may be divided into segments at the discretion of the City. At this time, only Phase I will be authorized. Subsequent phases are not guaranteed and are subject to the discretion of the City. The Engineer shall not begin work on a phase until he has received written authorization by the City to begin the work. Work completed prior to authorization from the City will not be eligible for compensation. The work for this project shall include the following phases:

- Phase 1 –the preparation and completion of the topographic and control survey for the proposed roadway and right-of-way mapping
- Phase 2 - the preparation and completion of the 30% design documents using either:
  - Option 1- conventional Design Method
  - Option 2 Construction Management at Risk
- Phase 3 - the preparation and completion of the 59% design documents using either:
  - Option 1- conventional Design Method
  - Option 2 Construction Management at Risk
- Phase 4 - one of the following options:
  - Option 1 – Prepare and submit permit applications and complete the design documents, or

- Option 2 – Prepare a design/build criteria package and assist the City in the selection of a firm to complete the design, permitting and construction of the project.

Work Prior to the issuance of the FHWA ROD is paid exclusively from City funds. Federal, State, and/or City funds will be used to fund the work effort after the FHWA ROD is issued.

At this time, only Phase 1 will be authorized. Subsequent phases are not guaranteed and are subject to the discretion of the City.

Due to the nature of the work, the successful Engineer shall establish and work from an office within the City of Port St Lucie for the duration of the project. The successful Engineer for this project will not be eligible to perform Construction Engineering and Inspection Services or Design/Build Services for this project.

The Engineer and all sub-consultants shall be pre-qualified in accordance with Florida Administrative Code Rule 14-75 to perform their respective work tasks to complete the work. A Scope of Services for this project is provided in Attachment A of this Proposal.

INQUIRIES

All questions related to the Request for Proposal must be directed to Cheryl Shanaberger in the Office of Management and Budget. She can be reached at (772) 871-7390. Questions shall be submitted in writing, if possible, at least ten (10) days prior to proposal opening. Questions may be e-mailed to cheryls@cityofpsl.com. To ensure fair consideration for all proposers, it must be clearly understood that Mrs. Shanaberger is the only individual who is authorized to represent the City. Questions submitted to any other person in any other department will not be addressed. Additionally, the City prohibits communications initiated by a proposer to **any** City Official or employee evaluating or considering the proposals **(up to and including the Mayor and City Council)**, prior to the time an award decision has been made.

CONTENT OF RESPONSE

Submittal of E-Bid - All proposals shall be submitted by completing and returning the Questionnaire. The Questionnaire should be typed or printed and signed. All submittals are required to be electronic. No hard copies will be accepted.

A. Request Bid Specifications, #20120061 from Onvia, via phone 800-711-1712 or via internet www.cityofpsl.com

B. Download the Questionnaire and save to your hard drive, program is in Word 2003 Professional. Enter information requested on the Questionnaire.

C. Electronically sign the Questionnaire where indicated.

D. Upload and submit the Questionnaire for E-Bid #20120061, Form 330, Certified Minority Business Certificate, W-9 and insurance onto Demandstar by the due date and time. Acknowledge all Addenda on the Questionnaire.

E. Enter Zero on the web page for cost or you will receive an error message and your submittal will be denied.

G. All required documents are to be submitted in the order as per Page 2 and in one file compatible with Microsoft Office 2003

** **Only electronic replies are required. No hard copies will be accepted. Please try to limit your file to 1.5 mg.**

TENTATIVE SCHEDULE

It is the intent of the City to have this project completed within a limited time frame. Therefore, priority will be given to firms who recognize and display the ability to work within the restrictions of the following tentative schedule:

Review and Selection Process:

All times are EST

Advertisement with Onvia DemandStar	August 17, 2012
Pre-bid*	September 5, 2012 @ 9:00 A.M.
Proposal Due	September 18, 2012 @ 3:00:0 P.M.
Evaluation Committee**	October 10, 2012 @ 10 - 11:00 A.M
Q & A**	October 16, 2012 @ 10:00 AM – 1PM
Tentative City Council Short List Approval	October 22, 2012
Tentative Negotiations	October 31, 2012 @ 9 A.M.
Tentative City Council Contract Approval	November 13, 2012

*Pre-bid will meet in the City Hall Campus in the Training Room Building B, first floor
** Evaluation Committee and Q & A will be held in OMB conference room at City Hall Campus in Building A, Room 390.

Project Milestone	*Tentative Schedule*
Notice to Proceed	November 30, 2012
Complete Phase 1 – Survey and Right-of-Way Mapping	March 26, 2013
Complete Phase 2 - 30% Design Documents	To Be Determined
Complete Phase 3 - 59% Design Documents	To Be Determined
Complete Phase 4 –Option 1 or 2	To Be Determined

EVALUATION AND AWARD

Responses will be scored in the following manner:

Criterion	**Maximum Score**
a) Proposer Information	3 points
b) Organization Chart	4 points
c) Sub-consultant Information	3 points
d) Experience on Similar Projects	15 points
e) Key Individuals	10 points
f) Location of Work	5 points
g) Project Approach	25 points
h) Time Commitment and Schedule	25 points
i) Attendance of Pre-proposal Meeting	5 points
j) Accepts Payment by P-Card	3 points
h) Minority Business	2 points
Total Maximum Points	**100**

The City's Office of Management & Budget (OMB) reserves the right to request any additional information needed for clarification from any proposer for evaluation purposes.

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SAMPLE
CITY OF PORT SAINT LUCIE
CONTRACT #20120061

This is a TBD, executed this _____ day of _____, 2012 by and between the CITY OF PORT ST. LUCIE, FLORIDA, a municipality, duly organized under the laws of the State of Florida, hereinafter called "City" party of the first part, , a Florida Corporation, Telephone No. Fax No. , hereinafter called "Engineer", party of the second part.

RECITALS

In consideration of the below agreements and covenants set forth herein, the parties agree as follows:

SECTION I
NOTICES & DESCRIPTION OF SERVICES TO BE PROVIDED

The scope of work that the Engineer has agreed to perform pursuant to E-bid #20120061 is for the Construction Engineering Inspection and Geotechnical Services for the St. Lucie North Drainage Improvement project.

Notices

All notices or other communications hereunder shall be in writing and shall be deemed duly given if delivered in person, sent by certified mail with return receipt request, email or fax and addressed as follows unless written notice of a change of address is given pursuant to the provisions of this Contract.

Engineer:

City Contract Administrator: Office of Management & Budget
Att: Cheryl Shanaberger, Deputy Director OMB
City of Port St. Lucie
121 SW Port St. Lucie, Blvd.
Port St. Lucie, FL. 34984
Telephone 772 871 7390 Fax 772 871 7337
Email: cheryls@cityofpsl.com

City Project Manager: Engineering Department
Attn: Roxanne M. Chesser, P.E.
City of Port St Lucie
121 SW Port St. Lucie, Blvd.
Port St. Lucie, FL. 34984
Telephone: 772-871-5186 Fax: 772-871-5289
Email: roxannec@cityofpsl.com

Description of Service

The scope of work that the Engineer has agreed to perform pursuant to E-bid #20120061 Professional Engineering Design Services for Crosstown Extension from Manth Lane to US Highway 1 is outlined below.

Please refer to Attachment A, *Scope of Services for Financial Project ID 410844-1-A8-01 Federal Project Number 7777-087-A.*

The Crosstown Parkway Extension is in the final stages of the National Environmental Policy Act permitting process. A Draft Environmental Impact Statement was approved by the Federal Highway Administration (FHWA) on July 1, 2011 and the City Council designated Alternative 1C as the Locally Preferred Alternative on January 23, 2012. The City is working towards a Final Record of Decision (ROD) from FHWA at the end of 2012 or beginning of 2013. In anticipation of the ROD, the City desires to expedite the schedule and fund the work to move forward with the initial engineering and design work for Alternative 1C.

The extension of the Crosstown Parkway to US Highway 1 is a 6-lane transportation facility consisting of, approximately, a one-mile of road section and a one-mile bridge span over the North Fork of the St Lucie River. This project shall be completed as required by the Florida Department of Transportation (FDOT), Federal Highway Administration (FHWA), and City criteria.

The work for this project is to be completed in four (4) phases. Any or all of the phases may be divided into segments at the discretion of the City. At this time, only Phase 1 will be authorized. Subsequent phases are not guaranteed and are subject to the discretion of the City. Subsequent phases will be negotiated and approved by a change order to this contract. The Engineer shall not begin work on a phase until he has received written authorization by the City to begin the work. Work completed prior to authorization from the City will not be eligible for compensation. The work for this project shall include the following phases:

- Phase 1 –the preparation and completion of the topographic and control survey for the proposed roadway and right-of-way mapping
- Phase 2 - the preparation and completion of the 30% design documents using either:
    - Option 1- conventional Design Method
    - Option 2 Construction Management at Risk
- Phase 3 - the preparation and completion of the 59% design documents using either:
    - Option 1- conventional Design Method
    - Option 2 Construction Management at Risk
- Phase 4 - one of the following options:
    - Option 1 – Prepare and submit permit applications and complete the design documents, or
    - Option 2 – Prepare a design/build criteria package and assist the City in the selection of a firm to complete the design, permitting and construction of the project.

The Engineer and all sub-consultants shall be pre-qualified in accordance with Florida Administrative Code Rule 14-75 to perform their respective work tasks to complete the work.

The Engineer is pre-qualified in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:_____.

Subconsultant "A" is prequalitied in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:_____.

Subconsultant "B" is prequalitied in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:_____.

Subconsultant "C" is prequalitied in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:_____.

Subconsultant "D" is prequalitied in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:_____.

Subconsultant "E" is prequalitied in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:_____.

The Engineer is responsible for notifying the City if the Engineer's or the Subconsultants' FDOT pre-qualification(s) are invalidated or expire. This notification shall be in writing and shall be within ten (10) working days of invalidation or expiration.

The Engineer shall establish and work from an office within the City of Port St Lucie for the duration of the project. The successful Engineer for this project will not be eligible to perform Construction Engineering and Inspection Services or Design/Build Services for this project.

SECTION II
TIME OF PERFORMANCE

Contract period shall start _____, 2012, and terminate, 201 , _____ calendar days. In the event all work required in the proposal specifications has not been completed by the specified date, the Engineer agrees to provide work as authorized by the Contract Supervisor until all work specified in the proposal specifications has been rendered.

Project Milestone	Tenative Schedule
Notice to Proceed	November 30, 2012
Complete Phase 1 – Survey and Right-of-Way Mapping	March 26, 2012
Complete Phase 2 - 30% Design Documents	To Be Determined
Complete Phase 3 - 59% Design Documents	To Be Determined
Complete Phase 4 – Option 1 or Option 2	To Be Determined

SECTION III
COMPENSATION

Will be negotiated

Invoices for services shall be submitted once a month, by the 10th of the month, and payments shall be made within thirty (30) days unless Engineer has chosen to take advantage of the Purchasing Card Program, which guarantees payment within several days. Payments shall be made provided the submitted invoice is accompanied by adequate supporting documentation and approved by Contract Supervisor as provided in Section XII.

No payment for projects involving improvements to real property shall be due until Engineer delivers to City a complete release of all claims arising out of the contract or receipts in full in lieu thereof, and an affidavit on his personal knowledge that the releases and receipts include labor and materials for which a lien could be filed.

All invoices and correspondence relative to this contract must contain the Purchase Order number and Contract number.

Work prior to the issuance of the FHWA ROD will be paid exclusively by City funds. Federal, State, and/or City funds will be used to fund the work effort after the FHWA ROD is issued.

SECTION IV
CONFORMANCE WITH PROPOSAL

It is understood that the materials and/or work required herein are in accordance with the proposal made by the Engineer pursuant to the Request for Proposal, Attachment A and Addenda on file in the Office of Management and Budget of the City. All documents submitted by the Engineer in relation to said proposal, and all documents promulgated by the City for inviting proposals are, by reference, made a part hereof as if set forth herein in full.

SECTION V
INDEMNIFICATION/INSURANCE

The Engineer agrees to indemnify, defend, and hold harmless the City, its officers and employees, from liabilities, damages, losses and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligent acts, recklessness, or intentional wrongful misconduct of the Engineer and persons employed or utilized by the Engineer in the performance of the construction contract. As consideration for this indemnity provision the Engineer shall be paid the sum of ten dollars ($10.00), which will be added to the contract price, and paid prior to commencement of work.

The Engineer shall, on a primary basis and at its sole expense, agree to maintain in full force and effect at all times during the life of this Contract, insurance coverage, limits, including endorsements, as described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Engineer are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Engineer under the Contract.

The parties agree and recognize that it is not the intent of the City of Port St. Lucie that any insurance policy/coverage that may be obtained pursuant to any provision of this Contract will provide insurance coverage to any entity, corporation, business, person, or organization, other than the City of Port St. Lucie and the City shall not be obligated to provide any insurance coverage other than for the City of Port St. Lucie or extend its sovereign immunity pursuant to Section 768.28, Florida Statutes, under its self insured program. Any provision contained herein to the contrary shall be considered void and unenforceable by any party. This provision does not apply to any obligation imposed on any other party to obtain insurance coverage for this project, or any obligation to name the City of Port St. Lucie as an additional insured under any other insurance policy, or otherwise protect the interests of the City of Port St. Lucie as specified in this Contract.

The Engineer shall agree to maintain Workers' Compensation Insurance & Employers' Liability in accordance with Section 440, Florida Statutes. Employers' Liability must include limits of at least $100,000 each accident, $100,000 each disease/employee, $500,000 each disease/maximum. A Waiver of Subrogation endorsement must be provided. Coverage should apply on a primary basis. Should scope of work performed by Engineer qualify its employee for benefits under Federal Workers' Compensation Statute (example, U.S. Longshore & Harbor Workers Act or Merchant Marine Act), proof of appropriate Federal Act coverage must be provided.

Commercial General Liability insurance issued under an Occurrence form basis, including Contractual liability, to cover the hold harmless agreement set forth herein, with limits of not less than:

Each occurrence	$1,000,000
Personal/advertising injury	$1,000,000
Products/completed operations aggregate	$2,000,000
General aggregate	$2,000,000
Fire damage	$100,000 any 1 fire
Medical expense	$10,000 any 1 person

An Additional Insured endorsement **must** be attached to the certificate of insurance and must include coverage for Completed Operations (should be ISO CG20101185 or CG20371001 & CG20100704) under the General Liability policy. Coverage is to be written on an occurrence form basis and shall apply as primary. A per project aggregate limit endorsement should be attached. Defense costs are to be in addition to the limit of liability. A waiver of subrogation is to be provided in favor of the City. Coverage shall extend to independent contractors and fellow employees. Contractual Liability is to be included. Coverage is to include a cross liability or severability of interests provision as provided under the standard ISO form separation of insurers clause. There shall be no exclusion for Mold, Silica or Respirable Dust or Bodily Injury or Property Damage arising out of heat, smoke, fumes or ash from a hostile fire.

The Engineer shall agree to maintain Professional Liability or equivalent Errors & Omissions Liability at a limit of liability not less than $1,000,000 Per Occurrence. When a self-insured retention (SIR) or deductible exceeds $10,000, City reserves the right, but not the obligation, to review and request a copy of Bidders most recent annual report or audited financial statement. For policies written on a "Claims-Made" basis, bidder warrants the retroactive date equals or precedes the effective date of this contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced; or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this Contract, bidder shall agree to purchase a SERP with a minimum reporting period not less than three (3) years.

Except as to Workers' Compensation and Employers' Liability, said Certificate(s) and policies shall clearly state that coverage required by the Contract has been endorsed to include the City of Port St. Lucie, a political subdivision of the State of Florida, its officers, agents and employees as Additional Insured with a CG 2026-Designated Person or Organization endorsement, or similar endorsement, added to its Commercial General Liability policy and Business Auto policy. The name for the Additional Insured endorsement issued by the insurer shall read "**City of Port St. Lucie, political subdivision of the State of Florida, its officers, employees and agents, and Contract #20120061 Design Crosstown Parkway Extension as additionally insured.**" Said policies shall be specifically endorsed to provide thirty (30) days written notice to the City prior to any adverse changes, cancellation, or non-renewal of coverage there under. Said liability insurance must be accepted by and approved by the City as to form and types of coverage. In the event that the statutory liability of the City is amended during the term of this Contract to exceed the above limits, the Engineer shall be required, upon receipt of thirty (30) days written notice from the City, to provide coverage at least equal to the amended statutory limit of liability of the City. Copies of the Additional Insured endorsements including Completed Operations coverage should be attached to the Certificate of Insurance.

The Engineer shall agree to maintain Business Automobile Liability at a limit of liability not less than $500,000 each accident covering any auto, owned, non-owned and hired automobiles. In the event, the Engineer does not own any automobiles; the Business Auto Liability requirement shall be amended allowing Engineer to agree to maintain only Hired & Non-Owned Auto Liability. This amended requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto Coverage

form. Certificate holder must be listed as additional insured. A waiver of subrogation must be provided. Coverage should apply on a primary basis.

The Engineer shall agree by entering into this Contract to a Waiver of Subrogation for each required policy. When required by the insurer, or should a policy condition not permit an Insured to enter into a pre-loss Contract to waive subrogation without an endorsement then Engineer shall agree to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy where a condition to the policy specifically prohibits such an endorsement, or voids coverage should Engineer enter into such a Contract on a pre-loss basis.

It shall be the responsibility of the Engineer to ensure that all subcontractors comply with the same insurance requirements referenced above and any additional insurance requirements needed to perform the scope of work as described herein.

All deductible amounts shall be paid for and be the responsibility of the Engineer for any and all claims under this Contract.

The Engineer may satisfy the minimum limits required above for Commercial General Liability, Business Auto Liability, and Employers' Liability coverage under Umbrella or Excess Liability. The Umbrella or Excess Liability shall have an Aggregate limit not less than the highest "Each Occurrence" limit for Commercial General Liability, Business Auto Liability, or Employers' Liability. When required by the insurer, or when Umbrella or Excess Liability is written on Non-Follow Form, the City shall be endorsed as an "Additional Insured."

The City, by and through its Risk Management Department, reserves the right, but not the obligation, to review and reject any insurer providing coverage.

SECTION VI
PROHIBITION AGAINST FILING OR MAINTAINING LIENS AND SUITS

Subject to the laws of the State of Florida and of the United States, neither Engineer nor any sub-consultant, supplier of materials, laborer or other person shall file or maintain any lien for labor or materials delivered in the performance of this Contract against the City. The right to maintain such lien for any or all of the above parties is hereby expressly waived.

SECTION VII
WORK CHANGES

The City reserves the right to order work changes in the nature of additions, deletions or modifications without invalidating the Contract, and agrees to make corresponding adjustments in the Contract price and time for completion. All changes will be authorized by a written change order signed by the City Manager or his designee as representing the City. Work shall be changed and the contract price and completion time shall be modified only as set out in the written change order. Any adjustment in the contract price resulting in a credit or a charge to the City shall be determined by mutual agreement of the parties.

SECTION VIII
COMPLIANCE WITH LAWS

The Engineer shall give all notices required by and shall otherwise comply with all applicable laws, ordinances and codes and shall, at his own expense, secure and pay the fees and charges for all licensing required for the performance of his work. All materials furnished and work done is to comply with all local, state and federal laws and regulations.

SECTION IX
ADDITIONAL REQUIREMENTS

In the event of any conflict between the terms and conditions, appearing on any purchase order or work authorization issued relative to this Contract, and those contained in this Contract and the RFP herein referenced, the terms of this Contract and RFP herein referenced shall apply.

SECTION X
LICENSING

Engineer warrants that he possesses all licenses and certificates necessary to perform required work and is not in violation of any laws. Engineer warrants that his license and certificates are current and will be maintained throughout the duration of the contract.

SECTION XI
SAFETY PRECAUTIONS

Precaution shall be exercised at all times for the protection of persons, including employees, and property. All plans and construction must be ADA compliant. The safety provisions of all applicable laws and building and construction codes shall be observed. The selected Proposer will submit all proposals in compliance with the 28 C.F.R. § 35.151. Where ADA and Florida Building Codes conflict the most stringent applies.

SECTION XII
ASSIGNMENT

Engineer shall not delegate or subcontract any part of the work under this Contract or assign any monies due him hereunder without first obtaining the written consent of the City.

SECTION XIII
TERMINATION

If the Engineer refuses or fails to prosecute the work with such diligence as will insure its completion within the time specified in this Contract, or as may be modified in accordance with this Contract, the City by written notice to the Engineer, may terminate Engineer's rights to proceed. On such termination, the City may take over the work and prosecute the same to completion, by contract or otherwise, and the Engineer and his

sureties shall be liable, jointly and severely to the City for any additional cost incurred by it in its completion of the work.

The City may terminate this Contract with or without cause by giving the Engineer thirty (30) days notice in writing. Upon delivery of said notice, the Engineer shall discontinue all services in connection with the performance of this contract and cancel all related existing third party contracts. Termination of the Contract by the City pursuant to this paragraph shall terminate all of the City's obligations hereunder and no charges, penalties or other costs shall be due Engineer except for work timely completed.

SECTION XIV
LAW AND VENUE

This Contract is to be construed as though made in and to be performed in the State of Florida and is to be governed by the laws of Florida in all respects without reference to the laws of any other state or nation. The venue of any action taken pursuant to this Contract shall be in St. Lucie County, Florida.

SECTION XV
APPROPRIATION APPROVAL

The Engineer acknowledges that the City of Port St Lucie's performance and obligation to pay under this contract is contingent upon an annual appropriation by the City Council. The Engineer agrees that, in the event such appropriation is not forthcoming, this Contract may be terminated by the City and that no charges, penalties or other costs shall be assessed.

SECTION XVI
RENEWAL OPTION

Not Applicable

SECTION XVII
ENTIRE AGREEMENT

The written terms and provisions of this contract shall supersede all prior verbal statements of any official or other representative of the City. Such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any manner whatsoever, this contract or contract documents.

SECTION XVIII
TRUTH-IN-NEGOTIATIONS

In accordance with the provisions of Section 287.055, Florida Statutes, the Engineer agrees to execute a truth-in-negotiations certificate and agrees that the original contract price and any additions may be adjusted to exclude any significant sums by which the contract price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs.

SECTION XIV
CONFLICT OF INTEREST

The City hereby acknowledges that the Engineer may be performing professional services for private developers within the Treasure Coast area. Should a conflict of interest arise between providing services to the City and/or other clients, the Engineer shall terminate its relationship with the other client to resolve the conflict of interest. The City Manager shall determine whether a conflict of interest exists. At the time of each Project Proposal the Engineers shall disclose all of their Treasure Coast clients and related Scope of Work.

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TRUTH-IN-NEGOTIATION CERTIFICATE AND AFFIDAVIT

STATE OF FLORIDA §
COUNTY OF ST. LUCIE §

Before me, the undersigned authority, personally appeared affiant _____ who being first duly sworn, deposes and says:

1. That the undersigned firm is furnishing this Truth in Negotiation Certificate pursuant to Section 287.055(5)(a) of the Florida Statutes for the undersigned firm to receive an agreement for professional services with the City of Port St. Lucie, St. Lucie County, Florida.

2. That the undersigned firm is a corporation which engages in furnishing professional architect and engineering services and is entering into an agreement with the City of Port St. Lucie, St. Lucie County, Florida to provide professional services for a project known as #20120061, Professional Engineering Design Services for Crosstown Extension from Manth to US1.

3. That the undersigned firm has furnished the City of Port St. Lucie, St. Lucie County, Florida a detailed analysis of the cost of the professional services required for the project.

4. That the wage rate information and other factual unit cost, which the undersigned firm furnished, were accurate, complete and current at the time the undersigned firm and the City of Port St. Lucie entered into the agreement for professional services on the project.

5. That the agreement which the undersigned firm and the City of Port St. Lucie entered into on this job contained a provision that the original agreement price and any additions thereto shall be adjusted to include any significant sums by which the City of Port St. Lucie determines the agreement price was increased due to inaccurate, incomplete or non-current wage rates or other factual unit cost and that all such agreement adjustments shall be made within one (1) year following the end of the agreement.

FURTHER AFFIANT SAYETH NAUGHT

_____
Name of Firm

_____
By: President

The foregoing instrument was acknowledged before me by _____ who has produced _____as identification or is personally known to me.

WITNESS my hand and official seal in the State of County last aforesaid this _____ day of _____, 2012.

(SEAL)

_____
Signature

_____
Notary Name (typed or printed)

_____
Title or Rank

QUESTIONNAIRE
E-Bid #20120061
Professional Engineering Design Services for Crosstown Extension from Manth to US1

It is understood and agreed that the following information is to be used by the City of Port St. Lucie to determine the qualifications of personnel and firm as presented in this document. The Proposer waives any claim against the City that might arise with respect to any decision concerning the qualifications of the Proposer or the personnel of the Proposer.

The undersigned attests to the truth and accuracy of all statements made on this questionnaire. Also, the undersigned hereby authorizes any public official, Consultant, Surety, bank material or equipment manufacturer or distributor, or any person, firm or corporation to furnish the City of Port St. Lucie any Pertinent information requested by the City deemed necessary to vary the information on this questionnaire.

Dated this _____ day of _____, 2012

_____
Name of Organization / Proposer

(This is a word document please add space as needed.)

The response to the total Proposal including all documents shall be limited to **50 pages** and submitted in one electronic file and should be no larger than 1.5 mg. The responses shall be concise and straightforward with emphasis on clarity and understanding of the project. Provide the response within the document below.

(This is a word document please add space as needed.)

1. *Proposer Information (Maximum of 3 Points)* : Provide the following information:
   - Describe the organizational history, years of providing engineering services, philosophy and professional qualifications of the Proposer's firm.
   - Provide a listing of the FDOT pre-qualifications held by the organization that are applicable to this project.
   - Provide a list of the litigation history for the past five (5) years where the proposer was a defendant in a law suit. Provide copies of any judgments and identifying claims made against the Proposer's firm.

2. *Organization Chart (Maximum of 4 Points):*
   - Show relationship of key personnel of Proposer and Sub-consultants for the project team.
   - Indicate why the proposed team is the best team for this project.

3. *Sub-consultant Information (Maximum 3 Points):*
   - For each Sub-consultant, describe the organizational history, years of providing the service, philosophy and professional qualifications of the firm.
   - Provide a listing of the FDOT pre-qualifications held by the Sub-consultant that are applicable to this project.

4. *Experience on Similar Projects (Maximum of 15 Points):* Provide examples of similar work experience for the Proposer and Sub-consultants. In all illustrations of experience, indicate:
   - Client (contact person, address & telephone numbers)

- Year completed
- Total cost of Proposer or Sub-consultant contract
- Change orders–include reasons and changes to contract amount and time
- Nature and extent of the work performed
- List individuals on the team that worked on the project and indicate their role on the project

5. *Key Individuals (Maximum of 10 Points):*
   - Names and resumes of the key individuals assigned to project
   - Identify the roles that the key individuals will fulfill for this project.
   - Identify the percent of time that the key individuals will work on this project
   - Provide a list of at least three references for each of the key individuals
   - State that key individuals, identified in this proposal, will be available for and assigned to this project.

6. *Location of Work (Maximum of 5 Points):* List the locations of the Proposer and Sub-consultant offices where work for this project will be accomplished and indicate the type of work to be completed in each office.

7. *Project Approach (Maximum of 25 Points):* Demonstrate your understanding of this project. Provide a description of the Proposer's approach to providing the required services. Provide a description of innovative concepts proposed to enhance value, quality and to control cost and schedule.

8. *Time Commitment and Schedule (Maximum of 25 Points):* Provide a discussion of the Proposer's ability to perform in a timely fashion including the projected workload of key personnel assigned to this project. Provide a schedule that includes, at a minimum, the following milestones along with a discussion of how the Proposer and Sub-consultant's will ensure that these timelines are achieved using and anticipated award date of November 30, 2012.
   - Topographic and control survey for the proposed roadway – March 26, 2013
   - Right-of-way mapping - March 26, 2013

9. *Did the Proposer attend the pre-proposal meeting? (Maximum of 5 Points)*

10. *Does your firm accept payment by P-card? (Maximum of 3 Points)*

11. *Is your firm Certified as a Minority Business? (Maximum of 2 Points)*

(This is a word document please add space as needed.)

ADDENDUM ACKNOWLEDGMENT - Proposer acknowledges that the following addenda have been received and are included in his/her proposal:

Addendum Number	Date Issued

CERTIFICATION:

This E-Bid is submitted by: Name (print)_____ who is an officer of the above firm duly authorized to sign proposals and enter into contracts. I certify that this E-Bid is made

without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of this E-Bid.:

_____ _____

Signature Title

If a corporation renders this E-Bid, the corporate seal attested by the secretary shall be affixed below. Any agent signing this E-Bid shall attach to this form evidence of legal authority.

Witnesses:

_____

_____

_____

_____

If Partnership:

_____

Print Name of Firm

By: _____

(General Partner)

If Corporation:

_____

Print Name of Corporation

By: _____

(President)

Attest: _____

(Secretary)

If Individual:

_____

Signature

_____

Print Name

CITY OF PORT ST. LUCIE

Sealed Electronic Proposal #20120061
(E-Bid)

"A City for All Ages"

ATTACHMENT A

SCOPE OF SERVICES

Professional Engineering Services For Crosstown Parkway Extension Manth Lane to US Highway 1

FINANCIAL PROJECT ID(S). 410844-1-A8-01

FEDERAL PROJECT NO. 7777-087-A

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Scope of Services for
Professional Consulting Engineering Services
Crosstown Parkway Extension - Manth Lane to US Highway 1

This Exhibit forms an integral part of the agreement between the City of Port St Lucie (hereinafter referred to as the CITY) and _____. (hereinafter referred to as the ENGINEER) relative to the transportation facility described as follows:

Financial Project ID:	410844-1-A8-01
Federal Aid Project No.:	7777-087-A
Bridge No.:	944019 (eastbound)
	944020 (westbound)
Description:	Crosstown Parkway Extension - Manth Lane to US Highway 1

1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the ENGINEER and the CITY in connection with Crosstown Parkway Extension - Manth Lane to US Highway 1 in Port St Lucie, Florida.

The general objective is for the ENGINEER to complete the survey, right-of-way mapping, 30% design documents, 59% design documents and either Option 1) the permitting and completion of the design or Option 2) the preparation of a design/build criteria package for the extension of the Crosstown Parkway

Elements of the work shall include roadways, structures, geotechnical activities, surveys, right-of-way mapping, drainage, signing and pavement markings, signalization, lighting, cost estimates, permitting and all necessary incidental items for a complete package.

The Scope of Services establishes which items of work described in the Plans Preparation Manual and other pertinent manuals to accomplish the work are specifically included in this project, and also which of the items of work will be the responsibility of the ENGINEER or the CITY.

All plans and design documents are to be prepared with Standard English values in accordance with all applicable FDOT manuals and guidelines.

The ENGINEER shall be aware that as a project is developed, certain modifications and/or improvements to the original recommendation may be required. The ENGINEER is to incorporate these refinements into the design and will consider this effort to be an anticipated and integral part of the work. This will not be a basis for any supplemental fee request(s).

The ENGINEER shall demonstrate good project management practices while working on this project. These include communication with the CITY and others as necessary, management of time and resources, and documentation. The ENGINEER shall set up and maintain throughout the design of the project a contract file in accordance with FDOT procedures. It shall be the ENGINEER's responsibility

to utilize a professional standard of care during the prosecution of the work commissioned under this contract.

The CITY or appointed representative will provide contract administration, management services, and technical reviews of all work associated with both options of the project. The CITY will provide job-specific information and/or functions as outlined in this scope of services.

2 PROJECT DESCRIPTION

The ENGINEER shall investigate the status of the project and become familiar with concepts, permits, and commitments (typical sections, alignments, environmental mitigation, construction methods, etc.) developed from prior studies including but not limited to the project Environmental Impact Statement (EIS). The ENGINEER shall use the approved concepts commitments, recommendations, and environmental constraints from the EIS as a basis for the design unless directed otherwise by the CITY.

The Crosstown Parkway Extension is in the final stages of the National Environmental Policy Act permitting process. A Draft Environmental Impact Statement was approved by the Federal Highway Administration (FHWA) on July 1, 2011 and the City Council designated Alternative 1C as the Locally Preferred Alternative on January 23, 2012. The City is working towards a Final Record of Decision (ROD) from FHWA at the end of 2012 or beginning of 2013. In anticipation of the ROD, the City desires to expedite the schedule and fund the work to move forward with the initial engineering and design work for Alternative 1C.

The extension of the Crosstown Parkway to US Highway 1 is a 6-lane transportation facility consisting of, approximately, a one-mile of road section and a one-mile bridge span over the North Fork of the St Lucie River. The Engineering Services for the Crosstown Parkway Extension shall be completed in four (4) phases. Any or all of the phases may be divided into segments at the discretion of the City. All work to complete these phases shall be in accordance with the Florida Department of Transportation (FDOT), Federal Highway Administration (FHWA), and City criteria. The four phases include:

- Phase 1 –The preparation and completion of the topographic and control survey for the proposed roadway and right-of-way mapping
- Phase 2 - The preparation and completion of the 30% design documents with either:
  - Option 1 – Conventional design method, or
  - Option 2 – Construction manager at risk method.
- Phase 3 - The preparation and completion of the 59% design documents with either:
  - Option 1 – Conventional design method, or
  - Option 2 – Construction manager at risk method.
- Phase 4 - one of the following options::
  - Option 1 – Prepare and submit permit applications and complete the design documents, or
  - Option 2 – Prepare a design/build criteria package and assist the City in the selection of a firm to complete the design, permitting and construction of the project.

Work prior to the issuance of the FHWA ROD be paid exclusively from City funds. Federal, State, and/or City funds will be used to fund work after the issuance of the FHWA ROD.

Due to the nature of the work, the successful Engineer shall establish and work from an office within the City of Port St Lucie for the duration of the project. The successful Engineer for this project will not be eligible to perform Construction Engineering and Inspection Services or Design/Build Services for this project.

The Engineer and all sub-consultants shall be pre-qualified in accordance with Florida Administrative Code Rule 14-75 to perform their respective work tasks to complete the work. The ENGINEER shall incorporate the following elements into the work as it relates to the phase and option.

2.1 Roadway (Activities 3.0, 4.0, and 5.0)

Public Involvement: Level 4, one project information workshop, at least one meeting with the City Council and any necessary meetings with City staff and residents and/or business owners.

Joint Project Agreements: Not required for this contract.

Specification Package Preparation: Web based specs preparation may be required.

Value Engineering: Optional Services.

Plan Type: Plan sheets at 1" = 50' and profile at 1" = 50' (H) and 1" = 5' (V)

Limits: Manth Lane to US Highway 1.

Typical Section: The typical right-of-way west of the River is 330 feet and includes an open swale drainage system. The right-of-way east of the river is 144 feet in width and includes a piped drainage system. Both sections will include a 6-lane divided roadway, 5-foot bike lanes, 8-foot wide multi-use paths, landscaping, up-lighting in medians, and pedestrian lighting.

Pavement Design: The ENGINEER shall provide a pavement design for the travel lanes and shoulder pavement shall be based upon 18 Kip axle loading.

Access Management Classification: Six-lane divided parkway with signalized intersections, limited right-in, and right-out access points at roadways. No commercial or residential driveways.

Major Intersections/Interchanges: Floresta Drive and US Highway 1.

Level of TCP Plans: Level 2

Temporary Signals: As needed.

Temporary Lighting: As needed.

Temporary Drainage: As needed.

Variations/Exceptions: As approved by CITY.

Back of Sidewalk Profiles: Profiles to show cross section of the entire right-of-way width including the tie-in to the existing grade.

2.2 Drainage (Activity 6.0)

The design of the proposed drainage system shall follow the concepts and criteria established in the Pond Siting Report and Preliminary Drainage Report included in the EIS documentation. West of the bridge will be an open drainage system with swales and cross drains while the drainage east of the bridge will be a closed drainage system.

2.3 Utilities Coordination (Activity 7.0)

The ENGINEER shall identify and coordinate with all utility owners within the project limits whether impacted or not impacted. Such utility owners shall include, but are not limited to, AT&T, Florida Power and Light, Florida Gas Transmission, City of Port St Lucie (water, sewer, stormwater, irrigation, traffic fiber optic), and Xfinity.

The ENGINEER shall design and permit the CITY'S proposed new and/or relocated water and sewer utilities within the project limits. All utilities shall be designed in accordance with all regulatory agencies, including but not limited to, the City of Port St Lucie Utility Systems Department, the Florida Department of Environmental Protection, and the Florida Department of Transportation, technical specifications and construction standards.

2.4 Permits (Activity 8.0)

The ENGINEER shall prepare and apply for the following permits:

City of Port St Lucie – Excavation and Engineering Permits

FDEP Permit to perform survey and geotechnical testing within State Lands

SFWMD Environmental Resource Permit

SFWMD Water Use Permit for Dewatering

SFWMD Water Use Permit for Irrigation

FDOT Right-of-Way Permit

USACE Section 404 Clean Water Act Permit

Coast Guard Permit

Water Regulatory Permits (FDEP and CITY)

Wastewater Regulatory Permits (FDEP and CITY)

Any and all other permits needed to complete the work.

2.5 Structures (Activities 9.0 to 18.0)

Sound Walls: The ENGINEER will complete a noise impact assessment to determine where the walls should be located and develop design plans as required.

Retaining Walls: Analyze the need for all retaining walls where required. The ENGINEER shall develop plans as required.

Miscellaneous Structures: The ENGINEER will develop the plans and determine the need, type and locations of any overhead sign structures, high mast lighting, box culvert extensions, foundations, mast arms, special drainage structures or other such miscellaneous structures required to complete the project.

Bridge: The bridge structures will have two parallel structures, each consisting of three 12-foot lanes, 1-foot 6 1/2-inch wide traffic railing barrier, an 8-foot inside shoulder, a 10-foot outside shoulder, and an 8-foot sidewalk with a 1-foot pedestrian/bicycle railing. The parallel structures will have a 10-foot 11-inch gap. The bridge structures shall meet or exceed a horizontal clearance of 75.5 feet and a vertical clearance of 18.6 feet. The bridge will be located within a 160-foot easement.

2.6 Signing and Pavement Markings (Activity 19.0 & 20.0)

Develop signing and pavement marking plans for the proposed improvements.

2.7 Signals (Activities 21.0 and 22.0)

Develop signal plans for the proposed intersections at Floresta Drive and US#1.

2.8 Lighting (Activities 23.0 and 24.0)

Develop lighting system plans for the proposed improvements. The lighting plans for the roadway west of the river shall be a continuation of the existing roadway lighting, median up-lighting in the medians and pedestrian lighting along the sidewalks as provided on existing Crosstown Parkway. The roadway, pedestrian and landscape lighting east of the River will need to be developed by the ENGINEER and presented to the CITY for acceptance prior to adoption into the contract documents.

The bridge lighting will need to be developed by the ENGINEER and presented to the CITY for acceptance prior to adoption into the contract documents.

2.9 Landscape Architecture (Activity 25.0 & 26.0)

The ENGINEER shall develop a concept landscape plan following the layout and scheme provided on the existing Crosstown Parkway for plants and hardscapes for review and acceptance by the CITY. Upon the CITY's acceptance of the plan, the ENGINEER shall incorporate the landscape plans into the construction documents.

The ENGINEER shall design the irrigation system in accordance with the CITY standards utilizing a system that is compatible with the existing system used by the CITY.

2.10 Survey (Activity 27.0)

Design Survey: The general description of the design survey limits are from Manth Lane to the western approach of the bridge and then the eastern approach to the bridge to US Highway 1. Additionally, the design survey limits shall include stormwater management ponds and the pipe routes from the roadway to the pond(s) and from the pond(s) to the outfall. A Digital Terrain Model (DTM) of the entire project limits is required

Subsurface Utility: The ENGINEER shall conduct sufficient test holes and investigations to identify the locations of existing utilities along the corridor.

Right-of-Way/Easement Survey: The ENGINEER shall prepare a right-of-way survey for the entire length of the project extending generally from Manth Lane to US Highway 1.

2.11 Photogrammetry (Activity 28.0)

The ENGINEER shall provide photogrammetry for the entire project limits for minimum 1"=50' resolution.

2.12 Mapping (Activity 29.0)

Right-of-Way/Easement Map: The ENGINEER shall prepare a right-of-way/easement map for the entire length of the project extending generally from Manth Lane to US Highway 1.

2.13 Geotechnical (Activity 30.0)

The ENGINEER shall perform geotechnical work as needed for the project.

2.14 Architecture (Activity 31.0) – Not Applicable to Project.

2.15 Noise Barriers (Activity 32.0)

The ENGINEER will complete a noise impact assessment to determine where barriers should be located and develop design plans as required.

2.16 Intelligent Transportation Systems (Activities 33.0 and 34.0) – Not Applicable to Project.

2.17 Project Schedule

Within ten (10) days after the Notice-To-Proceed, and prior to the ENGINEER beginning work, the ENGINEER shall provide a detailed project activity/event schedule for CITY and ENGINEER activities required to meet the CITY schedule. The schedule shall be accompanied by an anticipated payout and fiscal progress curve.

The schedule shall indicate all required submittals.

For the purposes of scheduling, the ENGINEER shall allow the CITY four (4) weeks of review time for each submittal.

Periodically, throughout the life of the project, the schedule and curves shall be reviewed and, with the approval of the CITY, adjusted as necessary to incorporate changes in the work concept and progress to date.

The approved schedule and schedule status report, along with progress and payout curves, shall be submitted with the monthly progress report. The ENGINEER shall submit the monthly progress report in PDF format by electronic mail to the CITY Project Manger.

2.18 Submittals

The ENGINEER shall provide plans and documents as required by CITY to adequately control, coordinate, and complete the project. The ENGINEER shall distribute submittals as directed by the CITY. Each submittal shall consist of five (5) hard copies and three (3) electronic copies (CDs) to the CITY.

2.19 Provisions for Work

All maps, plans and designs are to be prepared with English values in accordance with all applicable current FDOT manuals, memorandums, guidelines and other documents, including, but not limited to, those listed below:

General
Florida Statutes

Florida Administrative Codes

Florida Department of Transportation Project Development and Environmental Manual

Florida Department of Transportation Plans Preparation Manual

Florida Department of Transportation Standard Specifications for Road and Bridge Construction

Florida Department of Transportation Handbook for Preparation of Specifications Package

Florida Department of Transportation Design Standards for Design, Construction, Maintenance, and Utility Operations on the State Highway System

Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways

Bicycle Facilities Planning and Design Manual

CADD Production Criteria Handbook

CADD Manual

Equivalent Single Axle Load Guidelines

Florida Department of Transportation Basis of Estimates Manual

Quality Assurance Guidelines

Safety Standards

Rule 61G17-6, F.A.C., Minimum Technical Standards for Professional Surveyors and Mappers

Department of Environmental Protection Rules Governing Mean High Water and Jurisdictional Line Surveys

Any special instructions from the CITY or FDOT

Utility Accommodations Guidelines

Policy for Geometric Design of Highways and Streets

Florida Department of Transportation Materials Manual

Americans with Disabilities Act Accessibility Guidelines (ADAAG)

40 CFR, Part 61, Subpart M - National Emission Standard for Hazardous Air Polutants (NESHAP), Environmental Protection Agency (EPA)

Permits
Chapter 373, F.S.

Bridge Permit Application Guide, COMDT PUB P16591.3B

District Four Environmental Permitting Information Manual

U.S. Coast Guard

Drainage
Drainage Manual

District Four Drainage Practices and Guidelines

Culvert Handbook

Drainage Handbook – Optional Pipe Materials

Drainage Handbook - Erosion and Sediment Control

Stormwater Management Facility

Storm Drain Handbook

Hydrology

Temporary Drainage Handbook

SFWMD

Survey and Mapping
All applicable Florida Statutes and Administrative Codes

Applicable Rules, Guidelines Codes and authorities of other Municipal, County, State and Federal Agencies.

FDOT Aerial Surveying Standards for Transportation Projects Topic 550-020-002

FDOT Right of Way Mapping Handbook

FDOT Surveying Procedure Topic 550-030-101

Florida Department of Transportation Right of Way Procedures Manual

Florida Department of Transportation Surveying Handbook

Right of Way Mapping Procedure 550-030-015

Traffic Operation Manuals
American Disabilities Act

AASHTO - Guide for Development of Bicycle Facilities

Federal Highway Administration Standard Highway Signs Manual

Florida Department of Transportation Traffic Engineering Manual

Florida Department of Transportation Manual on Uniform Traffic Studies (MUTS)

National Electrical Code

National Electric Safety Code

Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD)

Minimum Specifications for Traffic Control Signal Devices

Florida Department of Transportation Median Handbook

AASHTO - An Information Guide for Highway Lighting Mapping

Right-of-Way Mapping Handbook

Florida Department of Transportation Right-of-Way Manual

Structures

AASHTO Standard Specifications for Highway Bridges and Interims (for curved steel bridges and pedestrian bridges only)

AASHTO LRFD Bridge Specifications and Interims

AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals, dated 2009 5th Addition

AASHTO LRFD Guide Specifications for Steel Curved Girder Bridges

AASHTO Guide Specifications for Horizontally Curved Highway Bridges

AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code

AASHTO Guide Specifications for Design of Pedestrian Bridges

AASHTO Guide Specifications for Structural Design of Sound Barriers

Florida Department of Transportation Structures Manual

Florida Department of Transportation Structures Standard and Semi-Standard Drawings

Florida Department of Transportation Structures Design Office Temporary Design Bulletins (available on Florida Department of Transportation Structures web site only)

Florida Department of Transportation Preferred Details (available on Florida Department of Transportation Structures web site only)

Florida Department of Transportation - New Directions For Florida Post-Tensioned Bridges Volumes 1-5

Florida Department of Transportation Bridge Load Rating Manual

Geotechnical
FHWA Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Specifications.

Soils and Foundation Handbook

Manual of Florida Sampling and Testing Methods

2.20 Services to be Performed by the CITY

When appropriate the CITY will provide those services and materials as set forth below:

Furnish standard CITY monuments for the bench line.

Provide general philosophies and guidelines of the CITY to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations, and time constraints will be completely defined by the Project Manager.

Provide the appropriate signatures on application forms.

Provide letters of authorization designating the ENGINEER as an agent of the CITY in accordance with F.S. 327.274.

Provide phase reviews

Furnish an approved Draft Environmental Impact Statement Document.

Furnish an approved Final Environmental Impact Statement Document, when it is available.

Furnish the Final Record of Decision Documentation when it is available

Furnish all future information that may come to the CITY during the term of the ENGINEER's Agreement, which in the opinion of the CITY is necessary for the prosecution of the work.

Provide project data currently on file.

Provide all available information in the possession of the CITY pertaining to utility companies whose facilities may be affected by the proposed construction.

Provide existing right-of-way maps.

Provide existing base maps showing drainage information

3 PROJECT COMMON AND PROJECT GENERAL TASKS

Project Common Tasks

Project Common Tasks, as listed below, are work efforts that are applicable to many project activities, 4.0 Roadway Analysis through 32.0 Noise Impact Design Assessment. These tasks are to be included in the scope in each applicable activity when the described work is to be performed by the ENGINEER.

Cost Estimates: The ENGINEER shall be responsible for producing an engineering construction cost estimate and reviewing and updating the cost estimate when scope changes occur and/or at milestones of the project.

Technical Special Provisions: The ENGINEER shall provide Technical Special Provisions for all items of work not covered by FDOT's Standard Specifications for Road and Bridge Construction and the workbook of implemented modifications.

A Technical Special Provision shall not modify the first nine sections of the Standard Specifications and implemented modifications in any way. All modifications to other sections must be justified to the CITY to be included in the project's specifications package, typically as special provisions and not as Technical Special Provisions.

The Technical Special Provisions shall be technical in nature and shall provide a description of work, materials, equipment and specific requirements, method of measurement and basis of payment.

Field Reviews: Includes all trips required to obtain necessary data for all elements of the project.

Technical Meetings: Includes meetings with CITY and/or Agency staff, between disciplines and subconsultants, such as access management meetings, utility coordination meetings, pavement design meetings, progress review meetings (phase review), miscellaneous meetings, etc.

Quality Assurance/Quality Control: It is the intention of the CITY that design ENGINEERs are held responsible for their work, including plans review. Detailed checking of ENGINEER plans by the CITY or assisting in designing portions of the project for the ENGINEER by the CITY is not the intent of having external design ENGINEERs. The purpose of plan reviews is to ensure that ENGINEER plans follow the plan preparation procedures outlined in the Plans Preparation Manual, that state and federal design criteria are followed with the CITY, and that the ENGINEER submittals are complete.

The ENGINEER shall be responsible for the professional quality, technical accuracy and coordination of all services furnished by the ENGINEER under this project.

The ENGINEER shall provide a detailed, project specific Quality Control Plan that describes the procedures to be utilized to verify, independently check, and review all maps, design drawings, specifications, and other documentation prepared as a part of the contract. The ENGINEER shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The names of the ENGINEER's staff that will perform the quality control reviews shall be included in the Quality Control Plan. The Quality Control Plan shall be reviewed and approved by the CITY. The Quality Control reviewer shall be a Florida Registered Professional Engineer. The Quality Control Plan may be one utilized by the ENGINEER as part of their normal operation or it may be one specifically designed for this project. The ENGINEER shall submit a Quality Control Plan for approval within 10 (ten) calendar days of the written Notice to Proceed. A marked up set of prints from a Quality Control Review indicating the reviewers for each component (structures, roadway, drainage, signals, geotechnical, signing and marking, lighting, surveys, etc.) and a written resolution of comments on a point-by-point basis will be required with each phase submittal. The

responsible Professional Engineer, Landscape Architect, or Professional Surveyor that performed the Quality Control review will sign a statement certifying that the review was conducted.

The ENGINEER shall, without additional compensation, correct all errors or deficiencies in the contract plans, contract technical specifications or the design/build package.

Independent Peer Review: When directed by the CITY, a third party subconsultant may perform independent peer reviews.

Supervision: Includes all efforts required to supervise all actives related to work on this project.

Coordination: Includes all efforts to coordinate with all disciplines of the project.

Project General Tasks

Project General Tasks, described in Sections 3.1 through 3.7 below, represent work efforts that are applicable to the **project** as a whole and not to any one or more specific project activity. The work described in these tasks shall be performed by the ENGINEER when included in the project scope.

3.1 Public Involvement

Includes coordination and documentation with local municipalities, residents, HOAs, and business owners. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the project. The ENGINEER shall provide to the CITY drafts of all Public Involvement documents (i.e., newsletters, property owner letters, PowerPoint presentations advertisements, etc.) associated with the following tasks for review and approval at least five (5) business days prior to printing and / or distribution. The ENGINEER will investigate potential meeting sites to advise the CITY on their suitability. The CITY will pay all costs for meeting site rents and insurance.

The ENGINEER will attend the meetings with an appropriate number of personnel to assist the CITY'S Project Manager.

It is estimated for this project there will be one project information workshop, at least one meeting with the City Council and any necessary meetings with City staff and residents and/or business owners.

3.1.1 Community Awareness Plan

Prepare a Community Awareness Plan (CAP) for review and approval by the CITY within 30 calendar days after receiving Notice to Proceed. This item will be reviewed and updated periodically through the life of the project.

3.1.2 Notifications

In addition to public involvement data collection, the ENGINEER shall assist the CITY in preparing notifications to elected officials and other public officials that the project is beginning.

3.1.3 Preparing Mailing Lists

At the beginning of the project, The ENGINEER shall identify all impacted property owners and tenants (within a minimum of 300 feet of the project corridor) Prepare a mailing list of all such entities. The

ENGINEER shall update the mailing list as needed during the life of the project.

3.1.4 Median Modification Letters

The ENGINEER shall prepare a median modification letter template to be sent to property owners along the corridor. In addition, the ENGINEER shall prepare a sketch of each proposed median modification for inclusion in the letter. The letters will be sent by the CITY.

3.1.5 Driveway Modification Letters

The ENGINEER shall prepare a driveway modification letter template to be sent to property owners along the corridor. In addition, the ENGINEER shall prepare a sketch of each proposed driveway modification for inclusion in the letter. The letters will be sent by the CITY.

3.1.6 Newsletters

The ENGINEER shall prepare newsletters for distribution to elected officials, public officials, property owners along the corridor and other interested parties. The letters will be sent by the ENGINEER.

3.1.7 Renderings and Fly-Throughs

The ENGINEER shall prepare renderings and fly-throughs for use in public meetings.

3.1.8 PowerPoint Presentations

The ENGINEER shall prepare PowerPoint presentations for use in public meetings.

3.1.9 Public Meeting Preparations

The ENGINEER shall prepare the necessary materials for use in public meetings.

3.1.10 Public Meeting Attendance and Follow-up

The ENGINEER shall attend public meeting(s), assist with meeting setup and take down. The ENGINEER shall also prepare a summary of the public meeting that includes all copies of all materials shown or provided at the public meeting. The summary shall also include a listing of all written comments made during or after the meeting and responses to those written comments.

The ENGINEER will investigate potential meeting sites to advise the CITY on their suitability. The CITY will pay all costs for meeting site rents and insurance.

The ENGINEER will attend the meetings with an appropriate number of personnel to assist the CITY 'S Project Manager. It is estimated for this project there will be at least two (2) Public meetings during the design.

3.1.12 Web Site

When requested by the CITY, the ENGINEER shall create and/or maintain a web site for the project.

3.2 Joint Project Agreements - Not Applicable to Project

3.3 Specifications Package Preparation

The ENGINEER shall prepare a specification package for the final contract documents for the bid letting or include the specifications in the design/build criteria package.

3.4 Contract Maintenance

Contract maintenance includes project management effort for complete setup and maintenance of files, developing monthly progress reports, schedule updates, work effort to develop and execute subconsultant agreements, etc.

3.5 Value Engineering (Multi-Discipline Team) Review – Optional Services

3.6 Prime ENGINEER Project Manager Meetings

Includes only the Prime Project Manager's time for travel and attendance at Activity Technical Meetings and other meetings listed in the meeting summary for Task 3.6 on tab 3.0 Project General Task of the staff hour forms. Staff hours for other personnel attending Activity Technical Meetings are included in the meeting task for that specific Activity.

3.7 Plans Update - Not Applicable to Project

3.8 Post Design Services

Post Design Services may include, but not limited to, meetings, construction assistance, plans revisions, shop drawing review, survey services and load ratings. Specific services will be negotiated as necessary as a contract amendment. Post Design Services are not intended for instances of ENGINEER errors and/or omissions.

3.9 Electronic Delivery

The ENGINEER shall deliver final contract plans or the design/build criteria package as electronically signed and sealed files delivered to the CITY on acceptable electronic media, as determined by the CITY.

3.10 Other Project General Tasks

Option I: In the event that the City proceeds with the completion of the construction documents, the ENGINEER shall review the bids received and report findings to the CITY. The ENGINEER shall participate in and assist the CITY with an assessment of the bids for conformance with the RFP and report findings to the CITY.

Option 2: In the event that the City proceeds with the issuance of a design/build criteria package, the ENGINEER shall review Letters of Interest received by the CITY, summarize, review and report finding to the CITY. The ENGINEER shall participate in a two-way technical review meeting and assist the CITY with an assessment of the technical merits and conformance of technical proposal submittals. The ENGINEER shall review the bids for conformance with the RFP and report findings to the CITY.

4.0 ROADWAY ANALYSIS

The ENGINEER shall analyze and document Roadway Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

4.1 Typical Section Package

The ENGINEER shall provide a Typical Section Package, approved by the CITY, prior to the Initial Engineering Phase plans submittal date.

4.2 Pavement Design Package

The ENGINEER shall provide a Pavement Design Package, approved by the CITY, in accordance with applicable FDOT pavement design manuals prior to the Initial Engineering Phase plans submittal date.

4.3 Access Management

The ENGINEER shall incorporate access management standards for this project in coordination with CITY staff. The ENGINEER shall review adopted access management standards and the existing access conditions (interchange spacing, signalized intersection spacing, median opening spacing, and connection spacing). Median openings that will be closed, relocated, or substantially altered shall be shown on plan sheets and submitted with supporting documentation for review with the Initial Engineering Phase plans submittal.

4.4 Horizontal/Vertical Master Design Files

The ENGINEER shall design the geometrics in support of the development of the criteria package using the design standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, access management, PD&E documents and scope of work.

4.5 Cross Section Design Files

The ENGINEER shall establish and develop cross section design files in accordance with the CADD manual in support of the development of the criteria package.

4.6 Traffic Control Analysis

The ENGINEER shall design a safe and effective Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. Prepare the TCP Typical section for phases of construction and obtain constructability review approval for the proposed bridge improvements. The conceptual design shall include construction phasing of roadways ingress and egress to existing property owners and businesses, routing, signing and pavement markings.

Special consideration shall be given to the construction of the drainage system when developing the construction phases. Positive drainage must be maintained at all times. The design shall include construction phasing of roadways to accommodate the construction of utilities (if required).

The ENGINEER shall investigate the need for temporary traffic signals, temporary drainage, temporary lighting, alternate detour roads, and the use of materials such as sheet piling in the analysis. This information shall be detailed in the final construction documents or, if needed, in the design/build criteria package. Traffic Control Plans will consist of Typical Sections and Phasing Notes

4.7 Master TCP Design Files

The ENGINEER shall develop master Traffic Control Plan (TCP) files for concept purposes, showing

each phase of the Traffic Control Plan. The Mainline TCP to be by typical sections and notes for each phase and referenced to Index 600 standards where appropriate.

4.8 Design Variations and Exceptions

The ENGINEER shall identify all applicable design variations and exceptions as listed in the Project Description section of this scope.

4.9 Design Report

The ENGINEER shall prepare all applicable report(s) as listed in the Project Description section of this scope.

The ENGINEER shall submit to the CITY design notes, data, and calculations to document the design conclusions reached during the development of the concept plans.

The design notes, data, and computations shall be recorded on size 8½"x11" sheets, fully titled, numbered, dated, indexed and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to 8½"x11" size. The data shall be in a hardback folder and in an electronic PDF format for submittal to the CITY.

4.10 Computation Book and Quantities Estimate

The ENGINEER shall prepare the Computation Book and various summary of quantities sheets. This includes all efforts required to develop the Computation Book and the supporting documentation, including construction days when required.

4.11 Cost Estimate

4.12 Technical Special Provisions

4.13 Other Roadway Analysis

4.14 Field Reviews

4.15 Technical Meetings

4.16 Quality Assurance/Quality Control

4.17 Independent Peer Review

When directed by the CITY, a third party subconsultant may perform independent peer reviews.

4.18 Supervision

4.19 Coordination

5 ROADWAY PLANS

The ENGINEER shall prepare Roadway, Drainage, Traffic Control, Utility Adjustment Sheets, plan sheets, notes, and details. The plans shall include the following sheets necessary to convey the intent and scope of the project.

5.1 Key Sheet

5.2 Summary of Pay Items Including Quantity Input

5.3 Drainage Map

5.4 Interchange Drainage Map - Not Applicable to Project

5.5 Typical Section Sheets

5.6 General Notes/Pay Item Notes

5.7 Summary of Quantities

5.8 Box Culvert Data Sheet

5.9 Bridge Hydraulics Recommendation Sheets

5.10 Summary of Drainage Structures

5.11 Optional Pipe/Culvert Material

5.12 Project Layout

5.13 Plan/Profile Sheet

5.14 Profile Sheet

5.15 Plan Sheet

5.16 Special Profile

5.17 Back of Sidewalk Profile Sheet

5.18 Interchange Layout Sheet - Not Applicable to Project

5.19 Ramp Terminal Details (Plan View) - Not Applicable to Project

5.20 Intersection Layout Details

5.21 Miscellaneous Detail Sheets

5.22 Drainage Structure Sheet (Per Structure)

5.23 Miscellaneous Drainage Detail Sheets

5.24 Lateral Ditch Plan/Profile

5.25 Lateral Ditch Cross Sections

5.26 Retention/Detention Ponds Detail Sheet

5.27 Retention Pond Cross Sections

5.28 Cross-Section Pattern Sheet

5.29 Roadway Soil Survey Sheet

5.30 Cross Sections

5.31 Traffic Control Plan Sheets

5.32 Traffic Control Cross Section Sheets

5.33 Traffic Control Detail Sheets

5.34 Utility Adjustment Sheets

5.35 Selective Clearing and Grubbing

5.36 Erosion Control Plan

5.37 SWPPP

5.38 Project Control Network Sheet

5.39 Environmental Detail Sheets

5.40 Utility Verification Sheet (SUE Data)

5.41 Quality Assurance/Quality Control

5.42 Supervision

6 DRAINAGE ANALYSIS

The ENGINEER shall analyze and document Drainage Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

The ENGINEER shall be responsible for designing a drainage and stormwater management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the CITY's Drainage Manual.

The ENGINEER shall coordinate fully with the appropriate permitting agencies and the CITY's staff. All activities and submittals should be coordinated through the CITY's Project Manager. The work will include the engineering analyses for any or all of the following:

6.1 Determine Base Clearance Water Elevation

Analyze, determine, and document high water elevations which will be used to set roadway profile grade. Determine surface water elevations at cross drains, floodplains, outfalls and adjacent stormwater ponds. Determine groundwater elevations at intervals between the above-mentioned surface waters.

6.2 Pond Siting Analysis and Report

ENGINEER will review the information provided in the PD&E documents and use this information to site the ponds.

6.3 Design of Cross Drains

Analyze the hydraulic design of cross drains. Check existing cross drains to determine if they are structurally sound and can be extended. Document the design as required. Determine and provide flood data as required.

6.4 Design of Roadway Swales/Ditches

ENGINEER shall design roadway conveyance swales/ditches. This includes determining ditch cross sections, grades, selecting suitable channel lining, designing the side drain pipes, and documentation.

6.5 Design of Outfalls

Analyze and document the design of ditch or piped outfalls.

6.6 Design of Stormwater Management Facilities (Offsite Ponds)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed pond layout (shape, contours, slopes, etc.), perform routing calculations, and design the outlet control structure.

6.7 Design of Stormwater Management Facility (Roadside Ditch as Linear Pond or Infield Pond)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed pond layout (shape, contours, slopes, etc.), perform routing calculations, and design the outlet control structure.

6.8 Design of Flood Plain Compensation Area - Not Applicable to Project

6.9 Design of Storm Drains

Develop a "working drainage map", determine runoff, inlet locations, and spread. Calculate hydraulic losses (friction, utility conflict and, if necessary, minor losses). Determine Design tailwater and, if necessary, outlet scour protection.

6.10 Optional Culvert Material

Determine acceptable options for pipe materials.

6.11 French Drain Design

Design French Drain Systems to provide stormwater treatment and attenuation. Identify location for percolation tests and review these, determine the size and length of French Drains, design the control structure/weir, and model the system of inlets, conveyances, French Drains, and other outfalls using a routing program such as ICPR.

6.12 Drainage Wells - Not Applicable to Project

6.13 Drainage Design Documentation Report

Compile drainage design documentation into report format. Include documentation for all the drainage design tasks and associated meetings and decisions.

6.14 Bridge Hydraulic Report

For Option I, calculate hydrology, hydraulics, scour, and deck drainage. Prepare report and the information for the Bridge Hydraulics Recommendation Sheet.

6.15 Temporary Drainage Analysis

Evaluate and address drainage to adequately drain the road and maintain existing offsite drainage during all construction phases. Provide documentation.

6.16 Cost Estimate

6.17 Technical Special Provisions

6.18 Other Drainage Analysis

6.19 Field Reviews

6.20 Technical Meetings

6.21 Quality Assurance/Quality Control

6.22 Independent Peer Review

When directed by the CITY, a third party subconsultant may perform independent peer reviews.

6.23 Supervision

6.24 Coordination

7 UTILITIES

The ENGINEER shall identify utility facilities and secure agreements, utility work schedules, and plans from the Utility Agency Owners (UAO) ensuring no conflicts exist between utility facilities and the CITY's construction project. The ENGINEER shall certify all utility negotiations have been completed with arrangements made for utility work to be undertaken.

7.1 Kickoff Meeting

7.2 Identify Existing UAO(s)

The CONSLUTANT shall verify that no other UAO'S exist other than those identified in paragraph 2.3 hereinabove.

7.3 Make Utility Contacts

The ENGINEER shall contact each UAO and verify the person(s) authorized to act and/or negotiate on behalf of the UAO, and shall make contact with each UAO, including contact by phone if necessary, notifying each UAO of all meeting and design schedules, as needed.

7.4 Exception Coordination

7.5 Preliminary Utility Meeting

The ENGINEER shall schedule (time and place), notify participants, and conduct a preliminary utility meeting with all affected UAO(s) for the purpose of presenting the project, review of the current design schedule, discuss the utility work by highway contractor option, provide each UAO two sets of plans, requesting one set be marked and returned identifying the type, size, and location of the UAO'S existing facilities, identifying whether the facility will remain in service or be abandon in-place, identifying the location of any proposed new facility, and shall request each UAO submit itemized requests for compensable reimbursement and/or justification for any utility exception, and discuss any future design issues that may impact utilities. The ENGINEER shall keep accurate minutes and distribute a copy to all attendees.

7.6 Individual/Field Meetings

The ENGINEER shall meet with each UAO, as needed, separately throughout the project design duration to provide guidance in the interpretation of plans, review changes to the plans and schedules, optional clearing and grubbing work, and assist in the development of the UAO(s) plans and work schedules. The ENGINEER is responsible for motivating the UAO to complete and return the necessary documents after each Utility Contact or Meeting.

7.7 Collect and Review Plans and Data from UAO(s)

The ENGINEER shall coordinate the collection of; and perform file retention of; all UAO submittals throughout the design, including but not limited to, plans, design calculations, work schedules, etc. The ENGINEER shall review the data provided and incorporate all pertinent data into the construction documents or the design/build criteria package, as directed by the CITY, and shall provided the CITY a copy of all data collected in an electronic PDF format for archiving.

7.8 Subordination of Easements Coordination

The ENGINEER, if requested by the CITY, shall transmit to and secure from the UAO the executed subordination agreements prepared by the CITY. The ENGINEER shall coordinate

7.9 Utility Design Meeting

The ENGINEER shall coordinate and conduct Utility Design Meetings with all UAO'S at each project milestone submittal, to assure each UAO'S work schedule and design remain valid with the project

design. The CONSULANT shall within10-days of notice-to-proceed, schedule and conduct a separate design meeting with the CITY'S Utility Systems Department, for the coordination, design, and permitting of the CITY'S proposed new and/or relocated water and/or wastewater facilities within the project limits.

7.10 Review Utility Markups and Work Schedules and Processing of Schedules and Agreements

The ENGINEER shall review all UAO utility mark-up drawings and work schedules for completeness, assuring type, size, material, and locations are consistent between the mark-ups and work schedules, and incorporate said information into the project drawings, and assist in the processing and execution of all UAO work schedules. The ENGINEER shall provide the CITY recommendations as to eligible and non-eligible compensable reimbursements and justification for all utility exceptions.

7.11 Utility Coordination/Follow-up

This includes follow-up, interpreting plans, and assisting and the completion of the UAO(s) work schedule and agreements. Includes phone calls, face-to-face meetings, etc., to motivate and ensure the UAO(s) complete and return the required documents in accordance with the project schedule. Ensure the resolution of all known conflicts. This task can be applied to all phases of the project.

7.12 Utility Constructability Review

The ENGINEER shall conduct a Utility Constructability Review of all proposed UAO' S proposed relocations and/or adjustments to assure each UAO'S design does not conflict with the project design, including the CITY'S water and wastewater design, and/or other UAO designs.

7.13 Additional Utility Services

The ENGINEER shall identify the CITY'S water and/or wastewater facilities effected by the proposed roadway, drainage and bridge improvements and shall design and permit the relocation, adjustment, abandonment and/or removal of said facilities, including any new facilities needed to meet the sizing and/or hydraulic capacities outlined in the CITY'S Water, Wastewater and Reclaimed Water Master Plan. The ENGINEER shall make all necessary recommendations to the CITY as to the method of installation for any water and/or wastewater facility crossing the North Fork of the St Lucie River. The CONSLUTANT shall complete the design and permitting to completion or include or include all preliminary findings and recommendations into the design/build criteria package.

7.14 Processing Utility Work by Highway Contractor (UWHC) - Not Applicable to Project

7.15 Contract Plans to UAO(s)

The ENGINEER shall provide each UAO all necessary Contract Plans, at each milestone phase of the design, including electronic formats as requests by UAO's, including but not limited AUTOCAD, and PDF formats.

7.16 Certification/Close-Out

7.17 Other Utilities

8 ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES

The ENGINEER shall notify the CITY in advance of all scheduled meetings with the regulatory agencies to allow a CITY representative to attend. The ENGINEER shall copy the CITY on all permit related correspondence and meetings.

8.1 Preliminary Project Research

The ENGINEER shall perform preliminary project research and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

8.2 Complete Permit Involvement Form

The ENGINEER shall document permit involvement in coordination with the CITY. This is to be done upon completion of preliminary project research. In addition, the ENGINEER shall prepare the Permits Required Memorandum.

8.3 Establish Wetland Jurisdictional Lines

The ENGINEER shall collect all data and information necessary to determine the boundaries of wetlands and surface waters defined by the rules or regulations of each agency processing or reviewing a permit application necessary to construct a CITY project.

The ENGINEER shall be responsible for, but not limited to, the following activities:

Determine landward extent of state waters as defined in Chapter 62-340 FAC as ratified in Section 373.4211 FS

Determine the jurisdictional boundaries of wetlands and surface waters as defined by rules or regulations of any other permitting authority that is processing a CITY permit application.

Prepare aerial maps showing the jurisdictional boundaries of wetlands and surface waters. Aerial maps shall be reproducible, of a scale no greater than 1"=200' and be recent photography. The maps shall show the jurisdictional limits of each agency. Xerox copies of aerials are not acceptable. All jurisdictional boundaries are to be tied to the project's baseline of survey. When necessary, jurisdictional maps shall be signed and sealed by either a Registered Professional Engineer or a Registered Professional Surveyor and Mapper.

Acquire written verification of jurisdictional lines from the appropriate environmental agencies.

Prepare a written assessment of the current condition and relative value of the function being performed by wetlands and surface waters. Prepare data in tabular form which includes the ID number for each wetland impacted, size of wetland to be impacted, type of impact and identify any wetland within the project limits that will not be impacted by the project.

8.4 Agency Verification of Wetland Data

The ENGINEER shall be responsible for verification of wetland data identified in Section 8.3 and coordinating regulatory agency field reviews, including finalization of wetland assessments with applicable agencies.

8.5 Complete and Submit All Required Permit Applications

The ENGINEER shall collect all of the data and information necessary to obtain the environmental permits required to construct a project.

The ENGINEER shall prepare each permit application for CITY approval in accordance with the rules and/or regulations of the environmental agency responsible for issuing a specific permit and/or authorization to perform work.

The ENGINEER will submit all permit applications, as directed by the CITY, and be responsible for payment of all permit fees.

8.6 Prepare Dredge and Fill Sketches

8.7 Prepare USCG Permit Sketches

8.8 Prepare Right-of-Way Occupancy Sketches

8.9 Prepare Coastal Construction Control Line (CCCL) Permit Sketches - Not Applicable to Project

8.10 Prepare Tree Permit Information - Not Applicable to Project

8.11 Mitigation Coordination and Meetings

8.12 Mitigation Design - Not Applicable to Project

8.13 Environmental Clearances and Technical Support

Contamination Impact Analysis: The ENGINEER shall provide technical information to the CITY necessary to perform a Contamination Screening Evaluation for the pond sites and complete the Contamination Screening Evaluation Report.

8.14 Environmental Clearances and Reevaluations

Contamination Impact Analysis: The ENGINEER shall perform the necessary analysis to complete the Phase II Contamination Screening.

8.15 Other Environmental Permits

8.16 Technical Meetings

8.17 Quality Assurance/Quality Control

8.18 Supervision

8.19 Coordination

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS

For Option I, the ENGINEER shall analyze, design, and develop contract documents for all structures. For Option 2, the ENGINEER shall analyze, design, and develop contract documents for the non-bridge structures only.

Options I and Options II shall be developed in accordance with applicable provisions as defined in Section 2.17, Provisions for Work. Individual tasks identified in Sections 9 through 18 are defined in the Staff Hour Estimation Handbook and within the provision defined in Section 2.17, Provisions for Work. Contract documents shall display economical solutions for the given conditions.

The ENGINEER shall provide Design Documentation to the CITY with each submittal consisting of structural design calculations and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all structural elements. These calculations shall be neatly and logically presented on digital media or, at the CITY's request, on 8 ½"x11" paper and all sheets shall be numbered. The final design calculations shall be signed and sealed by a Florida-registered professional engineer. A cover sheet indexing the contents of the calculations shall be included and the engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

9.1 Index of Drawings

9.2 Project Layout

9.3 General Notes and Bid Item Notes

9.4 Miscellaneous Common Details

9.5 Incorporate Report of Core Borings

9.6 Existing Bridge Plans - Not Applicable to Project

9.7 Assemble Computation Book and Quantities

9.8 Cost Estimate

9.9 Technical Special Provisions

9.10 Field Reviews

9.11 Technical Meetings

9.12 Quality Assurance/Quality Control

9.13 Independent Peer Review

9.14 Supervision

9.15 Coordination

10 STRUCTURES - BRIDGE DEVELOPMENT REPORT

The ENGINEER shall prepare a Bridge Development Report (BDR) for Option I and shall be submitted as part of the Initial Phase submittal or identify that one needs to be prepared in the design/build package for Option 2.

General Requirements

10.1 Bridge Geometry

10.2 Ship Impact Data Collection - Not Applicable to Project

10.3 Ship Impact Criteria - Not Applicable to Project

Superstructure Alternatives

10.4 Short-Span Concrete - Not Applicable to Project

10.5 Medium-Span Concrete

10.6 Long Span Concrete

10.7 Structural Steel - Not Applicable to Project

Foundation and Substructure Alternatives

10.8 Pier/Bent

10.9 Shallow Foundations - Not Applicable to Project

10.10 Deep Foundations

Movable Span (10.11 to 10.23 Not applicable to this project)

Other BDR Issues

10.24 Aesthetics

10.25 TCP/Staged Construction Requirements

10.26 Constructability Requirements

10.27 Abutment Slope/Wall Evaluation

10.28 Quantity and Cost Estimates

10.29 Quantity and Cost Estimates - Movable Span - Not Applicable to Project

10.30 Wall Type Justification

Report Preparation

10.31 Exhibits

10.32 Exhibits - Movable Span - Not Applicable to Project

10.33 Report Preparation

10.34 Report Preparation - Movable Span - Not Applicable to Project

10.35 BDR Submittal Package

Preliminary Plans

10.36 General Notes Sheets

10.37 Plan and Elevation Sheets

10.38 Construction Staging

10.39 Superstructure Section Sheets

10.40 Substructure Section Sheets

10.41 to 10.48 Movable Span - Not Applicable to Project

11 STRUCTURES - TEMPORARY BRIDGE (11.1 to 11.8 - Not Applicable to Project)

12 STRUCTURES - SHORT SPAN CONCRETE BRIDGE (12.1 to 12.28 Not Applicable to Project)

13 STRUCTURES – MEDIUM/LONG SPAN CONCRETE BRIDGE (Optional Services)

For Option I, the ENGINEER shall prepare contract documents for an optional medium/long span bridge.

General Layout Design and Plans

13.1 Overall Bridge Final Geometry

13.2 Expansion/Contraction Analysis

13.3 General Plan and Elevation

13.4 Construction Staging

13.5 Approach Slab Plan and Details

13.6 Miscellaneous Details

End Bent Design and Plans

13.7 End Bent Geometry

13.8 Wingwall Design and Geometry

13.9 End Bent Structural Design

13.10 End Bent Plan and Elevation

13.11 End Bent Details

Intermediate Bent Design and Plans

13.12 Bent Geometry

13.13 Bent Stability Analysis

13.14 Bent Structural Design

13.15 Bent Plan and Elevation

13.16 Bent Details

Pier Design and Plans

13.17 Pier Geometry

13.18 Pier Stability Analysis

13.19 Pier Structural Design

13.20 Pier Plan and Elevation

13.21 Pier Details

Miscellaneous Substructure Design and Plans

13.22 Foundation Layout

Superstructure Deck Design and Plans

13.23 Finish Grade Elevation (FGE) Calculation

13.24 Finish Grade Elevations

13.25 Bridge Deck Design

13.26 Bridge Deck Reinforcing and Concrete Quantities

13.27 Diaphragm Design/Jacking Loads

13.28 Superstructure Plan

13.29 Superstructure Section

13.30 Miscellaneous Superstructure Details

Reinforcing Bar Lists

13.31 Preparation of Reinforcing Bar List

Continuous Concrete Girder Design

13.32 Section Properties

13.33 Material Properties

13.34 Construction Sequence

13.35 Tendon Layouts

13.36 Live Load Analysis

13.37 Temperature Gradient

13.38 Time Dependent Analysis

13.39 Stress Summary

13.40 Ultimate Moments

13.41 Ultimate Shear

13.42 Construction Loading

13.43 Framing Plan

13.44 Girder Elevation, including Grouting Plan and Vent Locations

13.45 Girder Details

13.46 Erection Sequence

13.47 Splice Details

13.48 Girder Deflections and Camber

Simple Span Concrete Design

13.49 Prestressed Beam

13.50 Prestressed Beam Schedules

13.51 Framing Plan

Load Rating

13.52 Load Ratings

14 STRUCTURES - STRUCTURAL STEEL BRIDGE (14.1 to 14.60 Not Applicable to Project)

15 STRUCTURES - SEGMENTAL CONCRETE BRIDGE (Optional Services)

For Option I, the ENGINEER shall prepare contract documents for segmental concrete bridge.

General Layout Design and Plans

15.1 Final Bridge Geometry

15.2 Casting Geometry Calculation

15.3 Finish Grade Geometry Calculation

15.4 Finish Grade Elevations

15.5 Construction Schedule

15.6 General Plan and Elevation

15.7 Approach Slab Plan and Details

15.8 Miscellaneous Details

15.9 Existing Bridge Plans

End Bent Design and Plans

15.10 End Bent Geometry

15.11 Wingwall Geometry and Design

15.12 End Bent Structural Design

15.13 End Bent Plan and Elevation

15.14 End Bent Details

Pier Design and Plans

15.15 Pier Geometry

15.16 Pier Stability Analysis

15.17 Pier Construction Loads

15.18 Pier Structural Design

15.19 Pier Plan and Elevation

15.20 Pier Details

Miscellaneous Substructure Design and Plans

15.21 Foundation Layout

Longitudinal Analysis

15.22 Section Properties

15.23 Material Properties

15.24 Superimposed Dead Loads

15.25 Construction Sequence

15.26 Tendon Layouts

15.27 Live Load Analysis

15.28 Temperature Gradient

15.29 Time Dependent Analysis

15.30 Stress Summary

15.31 Ultimate Moments

15.32 Ultimate Shear

15.33 Construction Loading

Transverse Analysis

15.34 Time Dependent Analysis

15.35 Live Load Analysis

15.36 Temperature Gradient

15.37 Stress Summary

15.38 Ultimate Moments

15.39 Construction Loading

Superstructure Design

15.40 Typical Segment

15.41 Pier Segment

15.42 Expansion Joint Segment

15.43 Blister Details

15.44 Deviator Blocks

15.45 Bearings

15.46 Expansion Joints

15.47 Special Analysis

Superstructure Plans

15.48 Typical Sections

15.49 Finish Grade Elevations

15.50 Segment Layout / Designations

15.51 Typical Segments

15.52 Variable Depth Segments

15.53 Pier Segments

15.54 Expansion Joint Segments

15.55 CIP Closure Joint Details

15.56 Casting Geometry

15.57 Integrated 3-D Drawings

Post-Tensioning Details

15.58 Bulkhead Details

15.59 Transverse Tendon Layout

15.60 Longitudinal Tendon Layout

15.61 Temporary Post-Tensioning

15.62 Quantities and Stressing Schedule

15.63 Future Post-Tensioning

15.64 Anchorage Blisters

15.65 Deviation Blocks

15.66 PT Grouting Plan Details

Miscellaneous Details

15.67 Erection Sequence and Details

15.68 Access Opening Details

15.69 Bearings

15.70 Expansion Joints

15.71 Vermin Screen Details

15.72 Railing Details

15.73 Lighting and Luminaries

15.74 Architectural Details

15.75 Special Systems

Reinforcing Bar Lists

15.76 Preparation of Reinforcing Bar Lists

Load Rating

15.77 Load Ratings (LRFR)

16 STRUCTURES - MOVABLE SPAN (16.1 to 16.102 Not Applicable to Project)

17 STRUCTURES - RETAINING WALL

General Requirements

The ENGINEER shall prepare plans for retaining wall(s)as specified in Section 2.5.

17.1 Key Sheets

17.2 Horizontal Wall Geometry

Permanent Proprietary Walls

17.3 Vertical Wall Geometry

17.4 Semi-Standard Drawings

17.5 Wall Plan and Elevations (Control Drawings)

17.6 Details

Temporary Proprietary Walls – (17.7 to 17.10 Not Applicable to Project)

Cast-In-Place Retaining Walls

17.11 Design

17.12 Vertical Wall Geometry

17.13 General Notes

17.14 Wall Plan and Elevations (Control Drawings)

17.15 Sections and Details

17.16 Reinforcing Bar List

Other Retaining Walls and Bulkheads

17.17 Design

17.18 Vertical Wall Geometry

17.19 General Notes, Tables and Miscellaneous Details

17.20 Wall Plan and Elevations

17.21 Details

18 STRUCTURES – MISCELLANEOUS

Concrete Box Culverts

18.1 Concrete Box Culverts

18.2 Concrete Box Culverts Extensions

Strain Poles – (18.3 and 18.4 Not Applicable to Project)

Mast Arms

18.5 Mast Arms

Overhead/Cantilever Sign Structure

18.6 Cantilever Sign Structures

18.7 Overhead Span Sign Structures

18.8 Special (Long Span) Overhead Sign Structures

18.9 Monotube Overhead Sign Structure

18.10 Bridge Mounted Signs (Attached to Superstructure)

High Mast Lighting

18.11 High Mast Lighting Structures

Sound Barrier Walls (Ground Mount)

18.12 Horizontal Wall Geometry

18.13 Vertical Wall Geometry

18.14 Summary of Quantities – Aesthetic Requirements

18.15 Control Drawings

18.16 Design for Wall Height Covered by Standards

18.17 Design for Wall Height not Covered by Standards

18.18 Aesthetic Details

Special Structures

18.20 Fender System - Not Applicable to Project

18.21 Fender System Access - Not Applicable to Project

18.22 Special Structures - Not Applicable to Project

18.23 Other Structures

The ENGINEER shall analyze and document Signing and Pavement Markings Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

19 SIGNING AND PAVEMENT MARKING ANALYSIS

19.1 Traffic Data Analysis

The ENGINEER shall review the approved preliminary engineering report, typical section package, traffic technical memorandum and proposed geometric design alignment to identify proposed sign placements and roadway markings.

19.2 No Passing Zone Study – Not applicable to this Project

19.3 Reference and Master Design File

The ENGINEER shall prepare the Signing & Marking Design file to include all necessary design elements and all associated reference files.

19.4 Multi-Post Sign Support Calculations

The ENGINEER shall determine the appropriate column size from the FDOT's Multi-Post Sign Program(s).

19.5 Sign Panel Design Analysis

Establish sign layout, letter size and series for non-standard signs.

19.6 Sign Lighting/Electrical Calculations

Includes the verification of photometrics on lighted, load center and voltage drop calculations.

19.7 Quantities

19.8 Computation Book

19.9 Cost Estimates

19.10 Technical Special Provisions

19.11 Other Signing and Pavement Marking Analysis

19.12 Field Reviews

19.13 Technical Meetings

19.14 Quality Assurance/Quality Control

19.15 Independent Peer Review

19.16 Supervision

19.17 Coordination

20 SIGNING AND PAVEMENT MARKING PLANS

The ENGINEER shall prepare a set of Signing and Pavement Marking Plans in accordance with the Plans Preparation Manual that includes the following.

20.1 Key Sheet

20.2 Summary of Pay Items Including CES Input

20.3 Tabulation of Quantities

20.4 General Notes/Pay Item Notes

20.5 Project Layout

20.6 Plan Sheets

20.7 Typical Details

20.8 Guide Sign Work Sheet(s)

20.9 Traffic Monitoring Site

20.10 Cross Sections

20.11 Special Service Point Details

20.12 Special Details

20.13 Interim Standards

20.14 Quality Assurance/Quality Control

20.15 Supervision

21 SIGNALIZATION ANALYSIS

The ENGINEER shall analyze and document Signalization Analysis Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

21.1 Traffic Data Collection

The ENGINEER shall perform all efforts required for traffic data collection, including crash reports, 24-hour machine counts, 8-hour turning movement, 7-day machine counts and speed delay studies.

21.2 Traffic Data Analysis

The ENGINEER shall prepare determine signal operation plan, phasing & timing, forecasting traffic and intersection analysis.

21.3 Signal Warrant Study

21.4 Systems Timings

The ENGINEER shall determine proper coordination timing plans including, splits, force offs, offsets and preparation of time space diagram.

21.5 Reference and Master Signalization Design File

The ENGINEER shall prepare the Signalization Design file to include all necessary design elements and all associated reference files to conceptually depict the location of the signalization equipment and

identify conflicts with utilities.

21.6 Reference and Master Interconnect Communication Design File

The ENGINEER shall prepare the Interconnect Communication Design file to include all necessary design elements and all associated reference files to conceptually depict the locations of the interconnect/communication lines

21.7 Overhead Street Name Sign Design

21.8 Pole Elevation Analysis

21.9 Traffic Signal Operation Report

21.10 Quantities

21.11 Cost Estimate

21.12 Technical Special Provisions

21.13 Other Signalization Analysis

21.14 Field Reviews

21.15 Technical Meetings

21.16 Quality Assurance/Quality Control

21.17 Independent Peer Review

21.18 Supervision

21.19 Coordination

22 SIGNALIZATION PLANS

The ENGINEER shall prepare a set of Signalization Plans in accordance with the Plans Preparation Manual, which includes the following.

22.1 Key Sheet

22.2 Summary of Pay Items Including CES Input

22.3 Tabulation of Quantities

22.4 General Notes/Pay Item Notes

22.5 Plan Sheet

22.6 Interconnect Plans

22.7 Traffic Monitoring Site

22.8 Guide Sign Worksheet

22.9 Special Details

22.10 Special Service Point Details

22.11 Mast Arm/Monotube Tabulation Sheet

22.12 Strain Pole Schedule

22.13 TCP Signal (Temporary)

22.14 Temporary Detection Sheet

22.15 Utility Conflict Sheet

22.16 Interim Standards

22.17 Quality Assurance/Quality Control

22.18 Supervision

23 LIGHTING ANALYSIS

The ENGINEER shall analyze and document Lighting Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. Provide a lighting analysis of the existing lighting conditions and an analysis of the proposed conditions at the intersection with US Highway 1. Additionally, the lighting analysis shall document the lighting requirements for the bridge structures.

23.1 Lighting Justification Report

The ENGINEER shall prepare a Lighting Justification Report. The report shall be submitted under a separate cover with the Initial Engineering plans submittal, titled Lighting Design Analysis Report

23.2 Lighting Design Analysis Report

The ENGINEER shall prepare a Preliminary Lighting Design Analysis Report. The report shall include the Lighting Design Criteria that will be used.

After approval of the preliminary report, the ENGINEER shall submit a revised report including a detailed lighting design analysis for each submittal.

23.3 Aeronautical Evaluation - Not Applicable to Project

23.4 Voltage Drop Calculations

The ENGINEER shall submit voltage drop calculations showing the equation or equations used along

with the number of luminaries per circuit, the length of each circuit, the size conductor or conductors used and their ohm resistance values. The voltage drop incurred on each circuit (total volts and percentage of drop) shall be calculated, and all work necessary to calculate the voltage drop values for each circuit should be presented in such a manner as to be duplicated by the District.

Load analysis calculations shall be submitted for each branch circuit breaker and main breaker.

23.5 FDEP Coordination and Report

23.6 Reference and Master Design Files

The ENGINEER shall prepare the Lighting Design file to include all necessary design elements and all associated reference files.

23.7 Temporary Lighting

The ENGINEER shall provide temporary lighting for all affected phases of construction to light all detour roadways in areas where required. The temporary lighting shall be included with the Traffic Control Plans with proper notes, quantities and details.

23.8 Design Documentation

The ENGINEER shall submit a Roadway Lighting Design Documentation Book with each lighting plans submittal under a separate cover and not part of the roadway documentation book. At a minimum, the design documentation book shall include:

Lighting Calculations

Back up sheet for each bid item quantity total on each lighting plan sheet.

Phase submittal checklist.

Three-way quantity check list.

Structural calculations for special conventional pole concrete foundations.

Structural calculations for the high mast pole foundations.

Letter to the power company requesting service.

Power company confirmation letter on the requested services.

Voltage drop calculations.

Load analysis calculations.

23.9 Quantities

23.10 Cost Estimate

23.11 Technical Special Provisions

23.12 Other Lighting Analysis

23.13 Field Reviews

The ENGINEER shall collect information from the maintaining agencies and conduct a field review. The review should include but is not limited to the following:

Existing Lighting Equipment

Load Center, Capabilities and Condition/Age

Condition of Lighting Structure(s)

23.14 Technical Meetings

23.15 Quality Assurance/Quality Control

23.16 Independent Peer Review

23.17 Supervision

23.18 Coordination

24 LIGHTING PLANS

The ENGINEER shall prepare a set of Lighting Plans in accordance with the Plans Preparation Manual, which includes the following:

24.1 Key Sheet

24.2 Summary of Pay Item Sheet Including CES Input

24.3 Tabulation of Quantities

24.4 General Notes/Pay Item Notes

24.5 Pole Data and Legend & Criteria

24.6 Service Point Details

24.7 Project Layout

24.8 Plan Sheet

24.9 Special Details

24.10 Temporary Lighting Data and Details

24.11 Traffic Control Plan Sheets

24.12 Interim Standards

24.13 Quality Assurance/Quality Control

24.14 Supervision

25 LANDSCAPE ARCHITECTURE ANALYSIS – (25.1 to 25.16 Not Applicable to Project)

26 LANDSCAPE ARCHITECTURE PLANS

The ENGINEER shall prepare a set of Landscape Plans which includes the following.

26.1 Key Sheet

26.2 Tabulation of Quantities

26.3 General Notes

26.4 Tree and Vegetation Inventory, Protection and Relocation Plans

26.5 Planting Plans for Linear Roadway Projects

26.6 Planting Plans (Interchanges and Toll Plazas) - Not Applicable to Project

26.7 Planting Details and Notes

The ENGINEER shall include a written or graphic guide for care and maintenance of the irrigation system after the warranty period. This Maintenance Plan will be developed in coordination with the local government entity who assumes the maintenance obligation.

26.8 Irrigation Plans for Linear Roadway Project

26.9 Irrigation Plans for Interchange and Toll Plazas - Not Applicable to Project

26.10 Irrigation Details and Notes

26.11 Hardscape Plans

26.12 Hardscape Details and Notes

26.13 Maintenance Plan

The ENGINEER shall include a written plan for care and maintenance of the plants and beds, hardscape, and irrigation system after the warranty period. This maintenance plan will be developed in performance based language and will be in coordination with the local government entity who assumes the maintenance obligation.

26.14 Cost Estimate

26.15 Quality Assurance/Quality Control

26.16 Supervision

27 SURVEY

The ENGINEER shall perform survey tasks in accordance with all applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memorandum.

The ENGINEER shall submit all survey notes and computations to document the surveys. All field survey work shall be recorded in approved media and submitted to the CITY. Field books submitted to the CITY must be of an approved type. The field books shall be certified by the surveyor in responsible charge of work being performed before the final product is submitted.

The survey notes shall include documentation of decisions reached from meetings, telephone conversations or site visits. All like work (such as bench lines, reference points, etc.) shall be recorded contiguously. The CITY may not accept field survey radial locations of section corners, platted subdivision lot and block corners, alignment control points, alignment control reference points and certified section corner references. The CITY may instead require that these points be surveyed by true line, traverse or parallel offset.

Total station equipment used shall be compatible with FDOT Electronic Field Book processing standards. Data for review must be delivered on disk for input into FDOT Electronic Field Book Software.

All work shall be accomplished in accordance with the criteria established by the FDOTs Highway Field Specifications, Survey Handbook (Survey Procedure Topic No. 550-030-101a) (Chapter 20, sec 23 (3)(a), F.S.),CADD Production Criteria Handbook and must comply with the Minimum Technical Standards for Land Surveyors Rule 61G17-6 F.A.C., Florida Statue 472.027, the latest's edition of the District IV Survey Standards and Guidelines and any special instructions.

The surveyor shall comply at all times with applicable Federal, State, local laws and provisions and policies governing safety and health. This includes Title 29, Code of Federal regulations, Parts 1910 and 1976, Occupational safety and Health Regulations, including any subsequent revisions and updates. In order to conduct the public through the work area, full compliance with the current FDOT Roadway and Traffic Design Standards (600 Series), Survey Safety Handbook and current Maintenance of Traffic Training D.O.T. Topic No.625-010-010-a is a minimum requirement.

It will be the aerial firms responsibility not the surveyors to walk the project identifying and locating any missing items and describing the items such as sanitary sewer manholes, FPL manholes etc. marking all of this information on the check plots. Then the survey sub can take those check plots and locate the missing items marked on the plots that the aerial cannot locate.

At the completion of all survey and aerial work it is the responsibility of the ENGINEER to furnish the CITY with one CD with all the surveying and mapping information (GPS, TOPO, DTM, PNC, Target control XYZ etc.) with exception of Raster Images, signed in PEDDS by the Surveyor and Aerial Mapper with one hard copy of the PEDDS document.

Also, a Surveying and Mapping Report must accompany all of the above information along with an electronic copy of the report placed on the electronic information (file) supplied to the CITY.

27.1 Horizontal Project Network Control (HPNC)

Establish or recover HPNC, for the purpose of establishing horizontal control on the Florida State Plane

Coordinate System or datum approved by the CITY Surveyor and FDOT; will include primary or secondary control points. The Horizontal Datum to be used is NAD 1983/1990. The primary control points must be set near or outside the R/W Lines. The minimum distance between primary control points is 2000 feet and the maximum distance is 3000 feet. The primary control points must, also be inter-visible between each other. Concrete monuments with discs will be used for primary control. All concrete monuments must have a steel rod placed in the concrete for location purposes. Iron rods with caps will be used for secondary control. The ENGINEER must supply FDOT approved discs, field books and other required items. Includes analysis and processing of all field collected data, and preparation of forms.

27.2 Vertical Project Network Control (VPNC)

Establish or recover VPNC, for the purpose of establishing vertical control on datum approved by the District Surveyor; will include primary or secondary vertical control points. The Vertical Datum to be used is the NAVD 1988. All concrete monuments must have a steel rod placed in the concrete for location purposes. The primary vertical control points must be set outside the limits of construction, at no greater than 1000 feet intervals. Includes analysis and processing of all field collected data, and preparation of forms.

27.3 Alignment and/or Existing Right of Way Lines

Compute the Historic Baseline of Survey and the intersecting side street baselines. These lines must be placed in the TOPO file, PNC sheet and the survey database. Also includes analysis and processing of all field collected data, existing maps, and reports for identifying mainline, ramp, offset, or secondary alignments. Depict alignment and/or existing R/W lines (in required format) per CITY R/W Maps, platted or dedicated rights of way. In areas where it is apparent that roadway improvements are outside the computed existing R/W lines the surveyor set up a meeting to discuss this with the CITY. If reconstruction is to take place in these areas then R/W Reports will be ordered and plotted to verify the existing R/W.

The Historical Baseline will not be staked in the field on this Project.

27.4 Aerial Targets

Place, locate, and maintain required aerial targets and/or photo identifiable points. Includes analysis and processing of all field collected data, existing maps, and/or reports. Target placement and interval will be decided by the aerial ENGINEER.

27.5 Reference Points

Reference HPNC points, project alignment, vertical control points, section, ¼ section, center of section corners and G.L.O. corners as required.

27.6 Topography /DTM (3D)

Lamp will be used for pavement areas only. Grass areas must be ground surveyed.

Hard surfaces only will be accepted when using the Lamp. Grass areas must be ground surveyed. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

All hard surfaces DTM'S will be performed by the aerial firm and all ground DTM'S will be performed by the ground surveyor. The ground DTM'S include grass areas and obscured areas on hard surfaces.

All LAMP DTM and cross sections along with ground survey DTM information must be merged together by the aerial firm and delivered as one file to the Prime and the CITY along with a Mapper's Report and a PEDD'S signature.

27.7 Planimetric (2D)

Obtain TOPO information which the aerial firm could not obtain. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

27.8 Roadway Cross Sections/Profiles

Perform cross sections or profiles. May include analysis and processing of all field-collected data for comparison with DTM.

27.9 Side Street Surveys

Refer to tasks of this document as applicable.

27.10 Underground Utilities

Designation includes 2-dimensional collection of existing utilities and selected 3-dimensional verification as needed for designation. Location includes non-destructive excavation to determine size, type and location of existing utility, as necessary for final 3-dimensional verification. Survey includes collection of data on points as needed for designates and locates. Includes analysis and processing of all field collected data, and delivery of all appropriate electronic files.

27.11 Outfall Survey

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of a D.T.M. Survey with sufficient density of shots. Shoot all break lines, high and low points. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports

27.12 Drainage Survey

Locate underground data (xyz, pipe size, direction, type, condition and inverts on flow lines) that relates to above ground data. TOPO and obtain the inverts on Drainage structures.

27.13 Bridge Survey

For Option 1, locate required above ground features and improvements for the limits of the bridge. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

27.14 Channel Survey

For Option 1, locate all topographic features and improvements for the limits of the project by collecting the required data. Includes field edits, analysis and processing of all field collected data, maps, and/or reports.

27.15 Pond Site Survey

Refer to tasks of this document as applicable.

27.16 Mitigation Survey - Not Applicable to Project

27.17 Jurisdiction Line Survey

Perform field location (2-dimensional) of jurisdiction limits as defined by respective authorities, also includes field edits, analysis and processing of all field collected data, preparation of reports.

27.18 Geotechnical Support

Perform 3-dimensional (X,Y,Z) field location, or stakeout, of boring sites established by geotechnical engineer. Includes field edits, analysis and processing of all field collected data and/or reports.

27.19 Sectional/Grant Survey

Perform field location/placement of section corners, 1/4 section corners, and fractional corners where pertinent. Includes analysis and processing of all field-collected data and/or reports.

27.20 Subdivision Location

Survey all existing recorded subdivision/condominium boundaries, tracts, units, phases, blocks, street R/W lines, common areas. Includes analysis and processing of all field collected data and/or reports. If unrecorded subdivision is on file in the public records of the subject county, tie existing monumentation of the beginning and end of unrecorded subdivision.

27.21 Maintained R/W

Perform field location (2-dimensional) of maintained R/W limits as defined by respective authorities, if needed. Also includes field edits, analysis and processing of all field collected data, preparation of reports.

27.22 Boundary Survey

Perform boundary survey as defined by FDOT standards. Includes analysis and processing of all field-collected data, preparation of reports.

27.23 Water Boundary Survey

Perform Mean High Water, Ordinary High Water and Safe Upland Line surveys as required by FDOT standards.

27.24 Right of Way Staking

27.25 Right of Way Monumentation

Set R/W monumentation as depicted on final R/W maps for corridor and water retention areas.

27.26 Line Cutting

Perform all efforts required to clear vegetation from the line of sight.

27.27 Work Zone Safety

Provide work zone as required by FDOT standards.

27.28 Miscellaneous Surveys

Refer to tasks of this document, as applicable, to perform surveys not described herein. The percent for Supplemental will be determined at negotiations. This item can only be used if authorized in writing by the CITY.

27.29 Supplemental Surveys

Supplemental survey days and hours are to be approved in advance by CITY. Refer to tasks of this document, as applicable, to perform surveys not described herein.

27.30 Document Research

Perform research of documentation to support field and office efforts involving surveying and mapping.

27.31 Field Review

Perform verification of the field conditions as related to the collected survey data.

27.32 Technical Meetings

Attend meetings as required and negotiated.

27.33 Quality Control/Quality Assurance

Establish and implement a QAQC plan. Also includes subconsultant review, response to comments and any resolution meetings if required, preparation of submittals for review, etc.

27.34 Supervision

Perform all activities required to supervise and coordinate project. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the CITY.

27.35 Coordination

Coordinate survey activities with other disciplines. Unit is based on 3 percent of office support hours from tasks 1 through 28, where applicable.) These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the CITY.

28 PHOTOGRAMMETRY

Obtain TOPO information which the aerial firm could not obtain. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports. Lamp will be used for pavement areas only. Grass areas must be ground surveyed.

Hard surfaces only will be accepted when using the Lamp. Grass areas must be ground surveyed. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

All hard surfaces DTM'S will be performed by the aerial firm and all ground DTM'S will be performed by the ground surveyor. The ground DTM'S include grass areas and obscured areas on hard surfaces.

All LAMP DTM and cross sections along with ground survey DTM information must be merged together by the aerial firm and delivered as one file to the Prime and the Survey CITY along with a Mapper's Report and a PEDD'S signature.

Rasters in color will be provided to the ENGINEER from the Beginning of Survey to the End of Survey.

It will be the responsibility of the aerial firm to merge all survey and aerial data and supply the Prime with one complete file.

A flight plan must be delivered along with the cost/staff hours.

1. If "Raster" files are required; 2 copies (CD/DVD's) and 2 copies of all the FGDC Compliant Metadata must be delivered to this office before the project will be finalized.

2. If "Raster" files are not required then all the original film/digital images must be delivered to this office along with a flight plan, scale, date of photography, calibration report, make of camera, and all control (X,Y & Z) used to control the photography along with a Surveying report for the targets as soon as the aerial firm has completed their work. Furnish both TIFF and HMR files.

28.1 Flight Preparation

Review record data, create target diagrams, and plan the mission.

28.2 Control Point Coordination

Determine photo identifiable control points, and mark contact prints.

28.3 Mobilization

Perform pre- and post flight aircraft inspection; prepare the aircraft and camera for the mission.

28.4 Flight Operations

Operate the aircraft, aerial camera, and other instruments to obtain aerial photography.

28.5 Film Processing

Process, check, and annotate the aerial film.

28.6 Photo Products

Prepare contact prints, contact diapositives, and photo enlargements.

28.7 Scanning

Scan photographic images.

28.8 LiDAR

Includes data acquisition, post processing of LiDAR data to XYZ coordinates for "bare earth" classification.

28.9 Aerial Triangulation

Measure and adjust control within aerial images.

28.10 Surfaces

Includes collection of break lines and spot elevations.

28.11 Ortho Generation

Includes creation of final images.

28.12 Rectified Digital Imagery (Georeferenced)

Create the rectified digital image.

28.13 Mosaicking

Create the mosaic.

28.14 Sheet Clipping

Create plot files for sheets from the database.

28.15 Topographics

Prepare topographic maps including surface and planimetrics. (Photogrammetrist will not propose hours for Surfaces and Topographics.)

28.16 Planimetrics (2D)

Prepare 2D planimetric map.

28.17 Drainage Basin

Includes preparing drainage basin maps in clipped "sheet" format.

28.18 CADD Edit

Perform final edit of graphics for delivery of required Microstation .dgn, CADD, and Geopak files.

28.19 Data Merging

Merge photogrammetric files, field survey files, and data from other sources.

28.20 Miscellaneous

Other tasks not specifically addressed in this document.

28.21 Field Review

Perform on site review of maps.

28.22 Technical Meetings

Attend meetings as required.

28.23 Quality Control/Quality Assurance

Establish and implement a QC/QA plan.

28.24 Supervision

This task must be performed by the project supervisor, a Florida P.S.M.

28.25 Coordination

Coordinate with all elements of the project to produce a final photogrammetric product.

29 MAPPING

The ENGINEER will be responsible for the preparation of control survey maps, right of way maps, maintenance maps, sketches, other miscellaneous survey maps, and legal descriptions as required for this project in accordance with all applicable FDOT Manuals, Procedures, Handbooks, and Florida Statutes. All maps, surveys and legal descriptions will be prepared under the direction of a Florida Professional Surveyor and Mapper (PSM) to FDOT size and format requirements utilizing FDOT approved software, and will be designed to provide a high degree of uniformity and maximum readability. The ENGINEER will submit maps, legal descriptions, quality assurance check prints, checklists, electronic media files and any other documents as required for this project to the CITY for review at stages of completion as negotiated.

Master CADD File

29.1 Alignment

29.2 Section and 1/4 Section Lines

29.3 Subdivisions / Property Lines

29.4 Existing Right of Way

29.5 Topography

29.6 Parent Tract Properties and Existing Easements

29.7 Proposed Right of Way Requirements

The ENGINEER OF RECORD (EOR) will provide the proposed requirements. The PSM is responsible for calculating the final geometry. Notification of Final Right of Way Requirements along with the purpose and duration of all easements will be specified in writing.

29.8 Limits of Construction

The limits of construction DGN file as provided by the EOR will be imported or referenced to the master CADD file. Additional labeling will be added as required. The PSM is required to advise the EOR of any noted discrepancies between the limits of construction line and the existing/proposed right of way lines, and for making adjustments as needed when a resolution is determined.

29.9 Jurisdictional/Agency Lines

These lines may include, but are not limited to, jurisdictional, wetland, water boundaries, and city/county limit lines.

Sheet Files

29.10 Control Survey Cover Sheet

29.11 Control Survey Key Sheet

29.12 Control Survey Detail Sheet

29.13 Right of Way Map Cover Sheet

29.14 Right of Way Map Key Sheet

29.15 Right of Way Map Detail Sheet

29.16 Maintenance Map Cover Sheet

29.17 Maintenance Map Key Sheet

29.18 Maintenance Map Detail Sheet

29.19 Reference Point Sheet

29.20 Project Network Control Sheet

This sheet depicts the baseline, the benchmarks, the primary and secondary control points and their reference points including the type of material used for each point, their XYZ coordinates, scale factors and convergence angles.

29.21 Table of Ownerships Sheet

Miscellaneous Surveys and Sketches

29.22 Parcel Sketches (Optional Services)

29.23 TIITF Sketches (Optional Services)

29.24 Other Specific Purpose Survey(s) (Optional Services)

29.25 Boundary Survey(s) Map

29.26 Right of Way Monumentation Map

29.27 Title Search Map (Optional Services)

29.28 Title Search Report (Optional Services)

29.29 Legal Descriptions (Optional Services)

29.30 Final Map/Plans Comparison

The PSM will perform a comparison of the final right of way maps with the available construction plans to review the correctness of the type of parcel to be acquired and the stations/offsets to the required right of way. The PSM will coordinate with the EOR to resolve any conflicts or discrepancies and provide documentation of the review.

29.31 Field Reviews

29.32 Technical Meetings

29.33 Quality Assurance/Quality Control

29.34 Supervision

29.35 Coordination

29.36 Supplemental Mapping (Optional Services)

This task is to cover efforts resulting from major design and/or development changes after 59% map development that affect the right of way requirements/parent tract property lines and may include any number of tasks. Request and approval to utilize the Supplemental Mapping hours will be in writing and approved by the CITY prior to any work being done under this task.

30 GEOTECHNICAL

The ENGINEER shall prepare shall be responsible for a complete geotechnical investigation.

All work performed by the ENGINEER shall be in accordance with FDOT standards. Prior to beginning each phase of investigation and after the Notice to Proceed is given, the ENGINEER shall submit investigation plan for approval and meet with the CITY's Geotechnical Engineer or representative to review the project scope and CITY requirements. The investigation plan shall include, but not be limited to, the proposed boring locations and depths, and all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site. Additional meetings may be required to plan any additional field efforts, review plans, resolve plans/report comments, resolve responses to comments, and/or any other meetings necessary to facilitate the project.

The ENGINEER shall notify the CITY in adequate time to schedule a representative to attend all related meetings and field activities.

30.1 Document Collection and Review

ENGINEER will review printed literature including topographic maps, county agricultural maps, aerial photography (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field reconnaissance, ENGINEER shall review U.S.G.S., S.C.S. and potentiometric maps, and identify areas with problematic soil and groundwater conditions.

The ENGINEER shall be responsible for coordination of all geotechnical related fieldwork activities.

Obtain pavement cores as directed in writing by the CITY.

If required by the CITY, a preliminary roadway exploration shall be performed before the Initial plans submittal. The preliminary roadway exploration will be performed and results provided to the Engineer of Record to assist in setting roadway grades and locating potential problem areas. The preliminary roadway exploration shall be performed as directed in writing by the CITY.

ENGINEER shall perform specialized field-testing as required by project needs and as directed in writing by the CITY.

All laboratory testing and classification will be performed in accordance with applicable FDOT standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

30.2 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. If the drilling program expects to encounter artesian conditions, the ENGINEER shall be responsible for plugging the borehole to acceptable standards.

30.3 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

30.4 Coordinate and Develop MOT Plans for Field Investigation

Coordinate and develop Maintenance of Traffic (MOT) plan. All work zone traffic control will be performed in accordance with the FDOT's Roadway and Traffic Design Standards Index 600 series.

30.5 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

30.6 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the CITY's Project Manager.

30.7 Groundwater Monitoring

Monitor groundwater, using piezometers.

30.8 LBR / Resilient Modulus Sampling

30.9 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

30.10 Soil and Rock Classification - Roadway

Refine soil profiles recorded in the field, based on results of laboratory testing.

30.11 Design LBR

Determine design LBR values from the 90% and mean methods.

30.12 Laboratory Data

Tabulate laboratory test results for inclusion in the geotechnical report, the report of tests sheet (Roadway Soil Survey Sheet), and for any necessary calculations and analyses.

30.13 Seasonal High Water Table

Review the encountered ground water levels and estimate seasonal high ground water levels. Estimate seasonal low ground water levels, if requested.

30.14 Parameters for Water Retention Areas

Calculate parameters for water retention areas, exfiltration trenches, and/or swales.

30.15 Delineate Limits of Unsuitable Material

Delineate limits of unsuitable material(s) in both horizontal and vertical directions. Assist the Engineer of Record with detailing these limits on the cross-sections. If requested, prepare a plan view of the limits of unsuitable material.

30.16 Electronic Files for Cross-Sections

Create electronic files of boring data for cross-sections.

30.17 Embankment Settlement and Stability

Estimate the total magnitude and time rate of embankment settlements. Calculate the factor of safety against slope stability failure.

30.18 Stormwater Volume Recovery and/or Background Seepage Analysis

Perform stormwater volume recovery analysis as directed by the CITY.

30.19 Geotechnical Recommendations

Provide geotechnical recommendations regarding the proposed roadway construction project including

the following: description of the site/alignment, design recommendations and discussion of any special considerations (i.e. removal of unsuitable material, consolidation of weak soils, estimated settlement time/amount, groundwater control, high groundwater conditions relative to pavement base, etc.) Evaluate and recommend types of geosynthetics and properties for various applications, as required.

Roadway

30.20 Pavement Condition Survey and Pavement Evaluation Report

If a pavement evaluation is performed, submit the report in accordance with Section 3.2 of the Materials Manual: Flexible Pavement Coring and Evaluation. Enter all core information into the Pavement Coring and Reporting (PCR) system.

30.21 Preliminary Roadway Report

If a preliminary roadway investigation is performed, submit a preliminary roadway report before the Initial plans submittal. The purpose of the preliminary roadway report will be to assist in setting road grades and locating potential problems.

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- Results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The ENGINEER will respond in writing to any changes and/or comments from the CITY and submit any responses and revised reports.

30.22 Final Report

The Final Roadway Report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- Results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The ENGINEER will respond in writing to any changes and/or comments from the CITY and submit any responses and revised reports.

30.23 Auger Boring Drafting

30.24 SPT Boring Drafting

Structures

The ENGINEER shall be responsible for coordination of all geotechnical related fieldwork activities.

ENGINEER shall perform specialized field-testing as required by needs of project.

All laboratory testing and classification will be performed in accordance with applicable FDOT standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

The staff hour tasks for high embankment fills and structural foundations for bridges, box culverts, walls, high-mast lighting, overhead signs, mast arm signals, strain poles, buildings, and other structures include the following:

30.25 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. If the drilling program expects to encounter artesian conditions, the ENGINEER shall be responsible for plugging the borehole to acceptable standards.

30.26 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

30.27 Coordinate and Develop MOT Plans for Field Investigation

Coordinate and develop MOT plan. All work zone traffic control will be performed in accordance with the FDOT's Roadway and Traffic Design Standards Index 600 series.

30.28 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

30.29 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the CITY's Project Manager.

30.30 Collection of Corrosion Samples

Collect corrosion samples for determination of environmental classifications.

30.31 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

30.32 Soil and Rock Classification - Structures

Soil profiles recorded in the field should be refined based on the results of laboratory testing.

30.33 Tabulation of Laboratory Data

Laboratory test results should be tabulated for inclusion in the geotechnical report and for the necessary calculations and analyses.

30.34 Estimate Design Groundwater Level for Structures

Review encountered groundwater levels, estimate seasonal high groundwater levels, and evaluate groundwater levels for structure design.

30.35 Selection of Foundation Alternatives (BDR)

Evaluation and selection of foundation alternative, including the following:

- Spread footings
- Prestressed concrete piling - various sizes
- Steel H- piles
- Steel pipe piles
- Drilled shafts

Foundation analyses shall be performed using approved FDOT methods. Assist in selection of the most economical, feasible foundation alternative.

30.36 Detailed Analysis of Selected Foundation Alternate(s)

Detailed analysis and basis for the selected foundation alternative. Foundation analyses shall be performed using approved FDOT methods and shall include:

- For pile and drilled shaft foundations, provide graphs of ultimate axial soil resistance versus tip elevations. Calculate scour resistance and/or downdrag (negative skin friction), if applicable.
- ENGINEER shall assist the Engineer of Record in preparing the Pile Data Table (including test pile lengths, scour resistance, downdrag, minimum tip elevation, etc.)
- Provide the design soil profile(s), which include the soil model/type of each layer and all soil-engineering properties required for the Engineer of Record to run the FBPier computer program. Review lateral analysis of selected foundation for geotechnical compatibility.
- Shallow foundation bearing capacity (including soil bearing capacity, minimum footing width, and minimum embedment depth).
- Estimated maximum driving resistance anticipated for pile foundations.
- Provide settlement analysis.

30.37 Bridge Construction and Testing Recommendations

Provide construction and testing recommendations including potential constructability problems.

30.38 Lateral Load Analysis (Optional)

30.39 Walls

Provide the design soil profile(s), which include the soil model/type of each layer and all soil engineering properties required by the Engineer of Record for conventional wall analyses and recommendations. Review wall design for geotechnical compatibility and constructability.

Evaluate the external stability of conventional retaining walls and retained earth wall systems. For retained earth wall systems, calculate and provide minimum soil reinforcement lengths versus wall heights, and soil parameters assumed in analysis. Estimate differential and total (long term and short term) settlements.

Provide wall construction recommendations.

30.40 Sheet Pile Wall Analysis (Optional)

30.41 Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations

Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.

30.42 Box Culvert Analysis

- Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.
- Provide lateral earth pressure coefficients.
- Provide box culvert construction and design recommendations.
- Estimate differential and total (long term and short term) settlements.
- Evaluate wingwall stability.

30.43 Preliminary Report - BDR

The preliminary structures report shall contain the following discussions as appropriate for the assigned project:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, SCS, USGS, geologic and potentiometric data.
- The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in FDOT's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

30.44 Final Report - Bridge and Associated Walls

The final structures report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, SCS, USGS, geologic and potentiometric data.
- The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in FDOT's Standard specification.

- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

30.45 Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights

The final reports shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, SCS, USGS, geologic and potentiometric data.
- The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in FDOT's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

Final reports will incorporate comments from the CITY and contain any additional field or laboratory test results, recommended foundation alternatives along with design parameters and special provisions for the contract plans and will include the following:

- All original plan sheets (11" x 17")
- One set of all plan and specification documents, in electronic format, according to FDOT requirements
- Two sets of record prints
- Six sets of any special provisions
- All reference and support documentation used in preparation of contract plans package

Additional final reports (up to four), aside from stated above, may be needed and requested for the CITY's Project Manager and other disciplines.

The final reports, special provisions, as well as record prints, will be signed and sealed by a Professional Engineer registered in the State of Florida.

Draft the detailed boring/sounding standard sheet, including environmental classification, results of laboratory testing, and specialized construction requirements, for inclusion in final plans.

30.46 SPT Boring Drafting

Prepare a complete set of drawings to include all SPT borings, auger borings and other pertinent soils information in the plans. Include these drawings in the Final Geotechnical Report. Draft borings, location map, S.C.S. map and U.S.D.A. map as directed by the CITY. Soil symbols must be consistent with those presented in the latest Florida Department of Transportation Soils and Foundations Handbook.

30.47 Other Geotechnical

30.48 Technical Special Provisions

30.49 Field Reviews

Identify and note surface soil and rock conditions, surface water conditions and locations, and preliminary utility conflicts. Observe and note nearby structures and foundation types.

30.50 Technical Meetings

30.51 Quality Assurance/Quality Control

30.52 Supervision

30.53 Coordination

30.54 Optional Preliminary Contamination Assessment

When required, all work shall be performed in accordance with current Florida Department of Environmental Regulation (DER) and Federal OSHA and EPA standards. The following work shall be included, but not limited to:

- A minimum of four borings will be required per site.
- Soil gas analysis will be required by use of a flame ionization detector; e.g. Organic Vapor Analyzer (OVA).
- Installation of monitoring wells may be required.
- Water sampling and laboratory analysis may be required. The State of Florida Department of Health shall certify the laboratory performing the analysis.

31 ARCHITECTURE DEVELOPMENT (Not Applicable to Project)

32 NOISE BARRIERS IMPACT DESIGN ASSESSMENT IN THE DESIGN PHASE

The ENGINEER shall perform the services necessary to reassess noise abatement identified as reasonable and feasible during the Project Development and Environmental (PD&E) phase, as directed and clarified by the CITY.

The noise barrier impact assessment shall be performed by a person knowledgeable in traffic noise analysis and approved by the CITY.

32.1 Noise Barriers Analysis

The ENGINEER shall review the preferred PD&E alternative to identify design changes that would require a reanalysis of traffic noise. Coordination will be held with the CITY prior to initiating any reanalysis to discuss the effect of the design change on the assumptions made in the noise study performed during PD&E.

The ENGINEER shall perform a land use review to identify noise sensitive sites that may have received

a building permit subsequent to the noise study performed during PD&E but prior to the date of public knowledge, or locations where land use has changed. Noise sensitive receivers that were not considered during the PD&E phase will be subjected to a traffic noise analysis and, if applicable, a noise barrier evaluation to be performed by the ENGINEER.

The ENGINEER shall review the commitments made during the PD&E phase regarding noise abatement at special use locations, if applicable. If warranted the ENGINEER shall collect the required data and perform a noise barrier analysis at special use areas using A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations.

The ENGINEER shall review the preliminary commitments made during the PD&E phase regarding noise barriers determined to be feasible and reasonable. If necessary, the ENGINEER will update the analysis of feasibility and reasonableness for these barriers using design details (e.g., profile data, horizontal alignment data, etc.) Additional survey may also be required at proposed barrier locations.

32.2 Noise Barrier Evaluation

Any noise barrier analysis performed by the ENGINEER will include the following:

Barrier heights and lengths will be evaluated using the latest version of the Federal Highway Administration's Traffic Noise Model (TNM) and identified on the state plane coordinate system. The ENGINEER will present the data along with a recommendation to the CITY for selection of the barrier height and length to be incorporated into the design plans. This recommendation shall consider noise barrier performance, cost (reasonableness) and engineering constraints.

When performing the design phase analysis, the ENGINEER shall incorporate into the analysis all pertinent engineering details developing during the Design Phase.

An evaluation of proposed barriers will be performed to identify any engineering conflicts or constraints. As part of this evaluation, the ENGINEER will prepare a summary package for distribution to various disciplines involved in the review. The ENGINEER will be responsible for documenting any resolutions to engineering conflicts or issues that precluded the construction of a noise barrier. At a minimum, the review will consider the following:

- Right of way needs including access rights (air, light, view, ingress/egress, outdoor advertising conflicts)
- Limited access issues
- Adequate easement for maintenance
- Design Review for construction and/or maintenance issues
- Structural and vegetative restrictions within easement
- Utility conflicts
- Drainage issues
- Safety Issues (e.g., line of site)
- Environmental Issues (e.g., wetland impacts)

After determining the height and length of the barriers, the ENGINEER shall coordinate with design engineers and District Noise Specialist to locate the barriers on the design plans. The ENGINEER shall re-analyze noise barriers for feasibility and reasonableness and re-establish barrier height and length if design constraints require alteration in the barrier location or dimensions.

The ENGINEER shall make a determination as to the accuracy of the elevation data needed to perform the Design Phase analysis and any noise barrier evaluation (Section 32.3). The ENGINEER shall review existing elevation data and elevation data to be provided under Section 27 (Survey) to determine if elevations for roadways, existing berms/walls, receiver points and ground elevation where noise barrier(s) are evaluated, etc. are sufficient to accurately perform the Design Phase analysis. In coordination with the CITY, the ENGINEER shall be responsible for determining the number and location of additional spot elevations needed to adequately simulate site specific conditions in the noise model to ensure that entered model elevations are within ±2 feet of actual/proposed. Assume up to twenty (20) spot elevations will be required unless a different number is agreed to by the CITY.

32.3 Public Involvement

If noise barriers are determined to be reasonable and feasible and a commitment to provide noise abatement is made, the ENGINEER shall carry out the Public Involvement necessary to inform the CITY whether or not the majority of benefited receivers desire the construction of a noise barrier and obtain input from them regarding barrier aesthetics (color and texture).The ENGINEER shall be responsible for coordinating with local government officials. If supported by the public, the ENGINEER shall design the noise barrier.

The ENGINEER may also be required to conduct Public Meetings or Workshops to address general noise issues with adjacent property owners. The number of meetings is project specific.

For all meetings, The ENGINEER is responsible for preparing all necessary display items or handouts, arranging meeting locations, notifying the public of the meetings and conducting the meetings. The number of meetings is project specific.

The ENGINEER shall bring to the attention of the CITY unforeseen information and issues which are relevant to the project decision. The ENGINEER shall abstain from indicating preferences for any of the barrier options prior to or during the property owners' workshop unless specifically requested to do so by the CITY.

The ENGINEER shall mark development plans per individual property owner requests, etc., regarding the effect of the project on the properties in question as directed by the CITY.

The plans should note the available noise barrier materials (approved for inclusion in the Qualified Products List) that will meet the project and aesthetic requirements.

The ENGINEER shall conduct a Public Hearing as identified in Section 32.4 of this Scope, as required.

32.4 Outdoor Advertising- Not Applicable

32.5 Noise Study Report Addendum

The ENGINEER shall document the results of the Design Phase traffic noise/noise barrier analysis and Public Involvement effort in a Noise Study Report Addendum. This report shall contain a complete representation of the project files. This shall include at a minimum, examples of all correspondence (i.e. letters, etc...), any mailing list(s), copies of all completed survey forms and return receipts and TNM input/output files. The ENGINEER will provide an electronic copy of the report, in PDF format, as well as all TNM input/output files that support the information documented in the report. A brief "read.me" file shall also be provided with the TNM files to explain the file naming procedure. The "read.me" file will facilitate locating modeling results documented in the report.

32.6 Barrier Material

The ENGINEER shall make a recommendation to the CITY on proprietary products approved and included in the Qualified Products List that meet the project requirements and that will eventually be listed in the plans.

32.7 Field Reviews

Field reviews will be conducted by the ENGINEER and shall include but not be limited to:

Verify the appropriateness of providing noise barriers at a given location and to verify that the placement of a noise barrier will be consistent with CITY requirements for sight distance, utility clearances, construction, and maintenance.

Verify land use changes and building permits with respect to the Project's date of Public Knowledge.

32.8 Technical Meetings

32.9 Quality Assurance/Quality Control

32.10 Supervision

32.11 Coordination

33 PROJECT REQUIREMENTS

33.1 Liaison Office

The CITY and the ENGINEER will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project. While it is expected the ENGINEER shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the CITY Project Manager.

33.2 Key Personnel

The ENGINEER's work shall be performed and directed by the key personnel identified in the project organization chart by the ENGINEER. Any changes in the indicated personnel shall be subject to review and approval by CITY.

33.3 Progress Reporting

The ENGINEER shall meet with the CITY as required and shall provide a written progress and schedule status reports that describe the work performed on each task. Progress and schedule status reports shall be delivered to the CITY concurrently with the monthly invoice. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

33.4 Correspondence

Copies of all written correspondence between the ENGINEER and any party pertaining specifically to this contract shall be provided to the CITY for their records within one (1) week of the receipt or

mailing of said correspondence.

33.5 Professional Endorsement

The ENGINEER shall have a Registered Professional Engineer in the State of Florida sign and seal all reports, documents, and plans as required by CITY standards.

33.6 Computer Automation

All conceptual plan drawings will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The CITY makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the ENGINEER to meet the requirements in the FDOT CADD Manual. The ENGINEER will submit final documents and files as described therein.

33.7 Coordination With Other ENGINEERs

The ENGINEER is to coordinate his work with any and all adjacent and integral ENGINEERs so as to effect complete and homogenous plans and specifications for the project(s) described herein.

33.8 Optional Services

At the CITY's option, the ENGINEER may be requested to provide optional services. The fee for these services shall be negotiated for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s).

34 Intelligent Transportation System Plans (34.1 to 34.20) Not Applicable to Project

35 INVOICING LIMITS

Payment for the work accomplished will be in accordance with Method of Compensation of this contract. Invoices shall be submitted to the CITY, in a format prescribed by the CITY. The CITY and the ENGINEER shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the CITY.

The ENGINEER will provide a list of key events and the associated total percentage of work considered to be complete at each event. This list and percentages shall be approved by the CITY and will be used to control invoicing. Payments will not be made that exceed the percentage of work for any event until those events have actually occurred and the results are acceptable to the CITY.

QUESTIONNAIRE
E-Bid #20120061
Professional Engineering Design Services for Crosstown Extension from Manth to US1

It is understood and agreed that the following information is to be used by the City of Port St. Lucie to determine the qualifications of personnel and firm as presented in this document. The Proposer waives any claim against the City that might arise with respect to any decision concerning the qualifications of the Proposer or the personnel of the Proposer.

The undersigned attests to the truth and accuracy of all statements made on this questionnaire. Also, the undersigned hereby authorizes any public official, Consultant, Surety, bank material or equipment manufacturer or distributor, or any person, firm or corporation to furnish the City of Port St. Lucie any Pertinent information requested by the City deemed necessary to vary the information on this questionnaire.

Dated this 18th day of September, 2012

Keith and Schnars, P.A.
Name of Organization/Proposer

(This is a word document please add space as needed.)

The response to the total Proposal including all documents shall be limited to **50 pages** and submitted in one electronic file and should be no larger than 1.5 mg. The responses shall be concise and straightforward with emphasis on clarity and understanding of the project. Provide the response within the document below.
(This is a word document please add space as needed.)

1. ***Proposer Information (Maximum of 3 Points):*** **Provide the following information:**
   - **Describe the organizational history, years of providing engineering services, philosophy and professional qualifications of the Proposer's firm.**

K&S is a multi-disciplinary consulting engineering firm incorporated as Keith and Schnars, P.A. in 1972 and succeeding firms dating back to 1929. Today, we employ more than 120 professionals and technical experts throughout the state. We have surveyed, prepared right-of-way maps, designed and supervised the construction of a significant portion of Florida's transportation infrastructure. Our client base is extremely diversified and includes municipalities, contractors, State agencies, and 60 City and County governments. K&S is a firm dedicated to the timely and cost-efficient delivery of services. In fact, in 2007, when the FDOT released its annual summary of design overruns (time and money), Keith and Schnars ranked among the best of the over two hundred firms surveyed. In the six-year period studied, K&S designed and surveyed twelve projects with a construction value in excess of $120 million dollars. **No other firm selected by FDOT in that six-year period completed this volume of work, and maintained such low overruns in cost and time.**

- **Provide a listing of the FDOT pre-qualifications held by the organization that are applicable to this project.**

The Engineer and all sub-consultants are pre-qualified in accordance with Florida Administrative Code Rule 14-75 to perform the following FDOT subgroups:

Table 1.1

	FDOT Pre-Qualifications/Team Member	K&S	RS&H	FRA	GFA	IF Rooks
2.0	Project Development and Environmental Studies	X	X	X		
3.1	Minor Highway Design	X	X	X		
3.2	Major Highway Design	X	X			
4.1.1	Miscellaneous Structure	X	X			
4.1.2	Minor Bridge Design	X	X			
4.2.1	Major Bridge Design - Concrete	X	X			
4.2.2	Major Bridge Design - Steel	X	X			
6.1	Traffic Engineering Studies	X	X	X		
6.2	Traffic Signal Timing	X	X	X		
7.1	Signing, Pavement Marking and Channelization	X	X	X		
7.2	Lighting	X	X	X		
7.3	Signalization	X	X	X		
8.1	Control Surveying	X	X	X		
8.2	Design, Right of Way and Construction Surveying	X		X		
8.3	Photogrammetric Mapping					X
8.4	Right of Way Mapping	X		X		
9.1	Soil Exploration				X	
9.2	Geotechnical Classification Lab Testing				X	
9.3	Highway Materials Testing				X	
9.4.1	Standard Foundations Studies				X	
11.0	Engineering and Contract Administration and Management	X				
15.0	Landscape Architect	X				

- **Provide a list of the litigation history for the past five (5) years where the proposer was a defendant in a law suit. Provide copies of any judgments and identifying claims made against the Proposer's firm.**

We provide below an updated summary of the claims (which we define as a lawsuit filed against us or a demand for arbitration) we have been party to over the course of the past five (5) years.

- *Scott v. Hubbard Construction Co. (2009):* This case involved a vehicular accident on a project where we provided C.E.I. Services. The claims against our firm in the case were quickly dismissed after we prevailed on a Motion for Summary Judgment.
- *Monroe v. Keith and Schnars (2008):* This case brought by a former employee involved an allegation regarding overtime pay on which our company prevailed. The claim was dismissed and case resolved to our satisfaction.
- *Facchina-Mcgaughan v. Keith and Schnars (2008):* We provided minor survey services for a General Contractor involved in the Miami Beach New World Symphony Expansion Project located at 1672 Drexel Avenue, Miami Beach, FL 33139. The Contractor's superintendent instructed our surveyors to use a point he pointed out as

a reference to start the project layout, we complied with Contractor's instructions, and the Contractor later drove foundation piles in the wrong location and additional piling to remedy the situation. The Contractor's insurance company paid the Contractor's claim for the cost of the additional piling, but then filed an indemnity claim against us for the Contractor's deductible. We deny negligence.

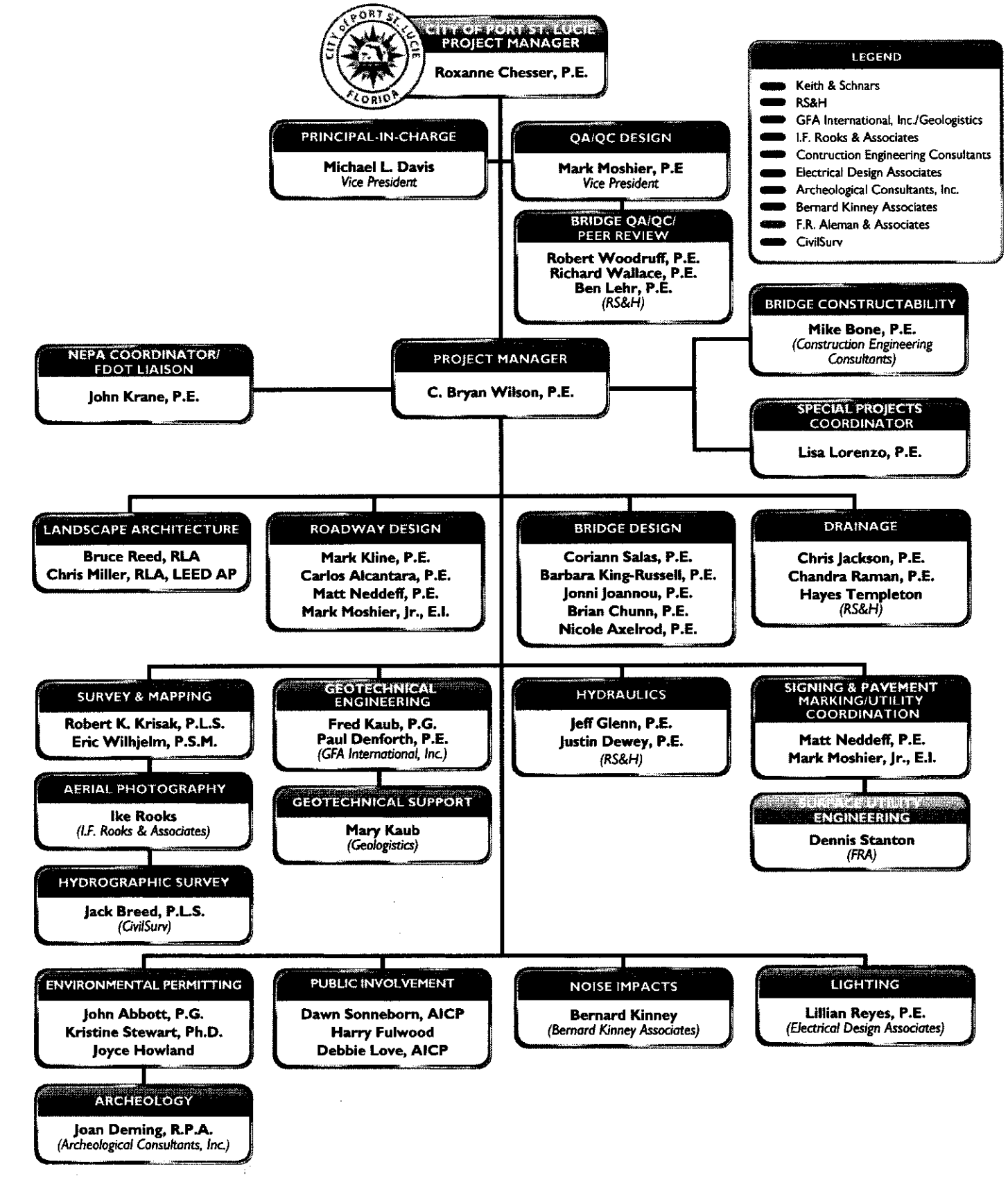
2. ***Organization Chart (Maximum of 4 Points):***
   - **Show relationship of key personnel of Proposer and Sub-consultants for the project team.**
   - **Indicate why the proposed team is the best team for this project.**

The Keith and Schnars Team provides the City unprecedented experience with the Crosstown Parkway Extension project. Our Team understands better than anyone the importance of this project to the City and the commitments made to protecting sensitive environmental resources. Keith and Schnars has demonstrated an unequivocal commitment to the City for over a decade, being there when the City called and often going well beyond contract requirements to get the job done.

Supported by structural and drainage engineers from RS&H, a noted bridge construction engineer and a host of other subconsultants, the Keith and Schnars Team will provide the City the most efficient and effective delivery of the new roadway and bridge. Our team of roadway and bridge designers have over 200 years of experience, most associated with FDOT and FHWA projects. Our team of environmental specialists and transportation planners will work closely with the designers to ensure compliance with all environmental requirements. The Keith and Schnars Team will use its Crosstown Parkway experience to jumpstart design and meet or exceed the City's expectations, including the project schedule. Our team will look for innovative design solutions to reduce costs and save time without reducing the quality of this landmark City project.

See Organizational Chart on Page 4.

K&S/RS&H Design Team
Crosstown Parkway Extension Project
Dedicated to Quality, Schedule and the City of Port St. Lucie



3. ***Sub-consultant Information (Maximum 3 Points):***
   - **For each Sub-consultant, describe the organizational history, years of providing the service, philosophy and professional qualifications of the firm.**
   - **Provide a listing of the FDOT pre-qualifications held by the Sub-consultant that are applicable to this project.**

Sub-Consultant Information:
For a listing of the FDOT Pre-qualifications held by the sub-consultants that are applicable to this project. See Table 1.1 in Section 1.

Reynolds, Smith & Hills, Inc.
RS&H's history dates back to 1941 and is currently an employee owned corporation that was established in 1990. Reynolds, Smith and Hills CS, Incorporated (RS&H CS) is the firm is wholly owned subsidiary. RS&H is a facilities and infrastructure consulting firm that employs a multidisciplined staff of over 750 architects, engineers, planners, environmental scientists, and technical support personnel. RS&H provides construction engineering and inspection (CEI) and engineering management services through RS&H CS. RS&H serves its clients through the firm's six market-specific Programs:

- Aerospace and Defense
- Aviation
- Corporate
- Education Health and Science
- Public Infrastructure
- Transportation

GFA International, Inc.
GFA is a full-service Engineering and Geological consulting organization providing Environmental, Geotechnical, Construction Materials Testing, Inspections and Code Compliance Services across a broad spectrum of industries. Since 1988, we have established a solid reputation of safe work, superior service, trustworthy business practices and strict attention to detail. As Florida's Leading Engineering Source, our goal is to provide our clients with cost-effective, efficient services that ensure the standard of performance of our industry. Not only is our professional staff highly experienced and technically skilled, but also our hands-on management team is readily available – anywhere – at any time.

Geologistics, Inc.
Geologistics specializes in Geotechnical and Environmental Drilling and sampling. From portable tripod rigs to large rubber tire trucks and a variety of ATV and track mounted drill rigs and service vehicles, Geologistics has the right equipment and qualified field crews to complete your drilling project. Our services are safe and on time. We dispatch only experienced drill crews to perform soil and rock core borings, installation of monitoring wells, and other drilling services. Our rigs feature the automatic hammer system required for Florida Department of Transportation SPT sampling.

I.F. Rooks & Associates, Inc.
I.F. Rooks & Associates is a full service aerial mapping and photogrammetric firm serving clients throughout Florida and the Southeastern United States. We have extensive experience in providing digital orthophotos, topographic and planimetric mapping, fixed-wing and helicopter aerial photography for transportation, site development, costal and environmental projects. The company was incorporated in 1968. The current management acquired control in 1972, and has operated the company continuously since that time. The company has evolved from a general Civil Engineering, Surveying firm to a 25 person Photogrammetric Engineering Company.

Construction Engineering Consultants
CEC was formed over a decade ago to focus the skills gained from a quarter century of construction and design experience on the needs of owners and contractors in the areas of design, specialty engineering, constructability, scheduling, estimating and claims analysis. Our niche is in providing engineering expertise founded on a deep understanding of construction.

Electrical Design Associates, Inc.
Electrical Design Associates, Inc. is a small sized consulting engineering firm specializing in electrical, instrumentation and Lighting design. We are a member of the U.S. Green Building Council, the NFPA and the Florida Board of professional engineers. We provide consulting engineering services to both the public and private sectors. In September of 1998, Electrical Design Associates, Inc. was formed. We are a Certified Minority/ Women Business Enterprise with offices in Palm Beach and Orange Counties. Our present staff includes registered engineers, graduate engineers, instrumentation designers, CADD technicians, and one field superintendent. Our staff's experience also includes municipal lighting projects including streetscapes, roadways, recreational facilities, active and passive facilities throughout the State for several municipalities including but not limited to the recently completed West Palm Beach Waterfront, the Old School Square in Delray Beach, the Ocean Front along Ocean Way in Deerfield Beach, the Village of Wellington, Port St. Lucie, Palm Beach County, Parkland, the City of Fort Lauderdale, Miramar, Pompano Beach, City of Sunrise, Martin County, Miami-Dade County, Lake Mary, North Miami Beach, Daytona Beach, the Town of Davie, Miami Beach, FDOT, as well as Florida Atlantic University.

Archeological Consultants, Inc.
ACI's success is based on professional integrity, a "client first" philosophy, and an unparalleled depth of knowledge. For over 35 years, ACI has successfully navigated clients through the complex local, state, and federal review process. ACI has four locations throughout Florida, providing Archaeological & Historical Surveys, National Register Nominations, Section 106 Case Study Reports, Preservation Planning and HABS / HAER.

Bernard Kinney Associates,Inc.
Bernard Kinney Associates,Inc. was established in June 2000. Mr. Kinney has over 18 years of experience in the field of Environmental Acoustics. Mr. Kinney's experience has been demonstrated through the successful completion of numerous large-scale transportation and construction noise monitoring projects for the Florida Department of Transportation (FDOT), Recognition as a qualified Expert Witness in the State of Florida in the field of transportation and construction noise for the FDOT Districts II & IV, the Orlando Orange County Expressway Authority, and the Jacksonville Transportation Authority, Development and implementation of comprehensive Sound Control Plans and Noise Monitoring Programs for the FDOT and Government Agencies, and most recently, the completion of the FTA / FRA Noise and Vibration Assessment for the FEC Amtrak High Speed Rail Study (ETDM # 11860). Mr. Kinney is a current member of the Florida Department of Transportation Noise Task Team (NTT) and is a Full Member of the Institute of Noise Control Engineering (INCE). Mr. Kinney holds certifications for the FHWA TNM 2.5 Noise Model and the Basic CadnaA Noise Model.

F.R. Aleman and Associates, Inc.
FRA was established in January 1987 by Mr. Frank R. Aleman, P.E. and several associates who were employed by Sperry Corporation (now UNISYS). Over the years, FRA has developed into a well-respected, highly technological private consulting engineering and surveying firm dedicated to providing professional services and solutions to numerous governmental and private agencies. Today, Mr. Aleman is the President and sole owner of this corporation. FRA is a Minority Owned Consulting Engineering & Surveying Firm. FRA's knowledge and expertise lay in Project Development and Environmental Studies; Major and Minor Highway Design - Roadway; Traffic Engineering and Operations Studies; Intelligent Transportation Systems Analysis Design and Implementation; Traffic Operations Design; Surveying and Mapping; Construction Engineering Inspection; Planning and Subsurface Utility Engineering. The FRA Team is comprised of nearly seventy hundred fulltime professionals who take pride in doing their jobs exceptionally well. The firm has grown to five offices located throughout the State of Florida in Miami (headquarters), Orlando, Tampa, Jacksonville and Tallahassee.

CivilSurv Design Group, Inc.
CivilSurv is a full-service, multi-discipline, statewide Infrastructure services firm. Our veteran staff of Professional Engineers, Urban Planners and Surveyors and Mappers provides a comprehensive suite of services to support public and private client needs for Land, Development, Utilities, Water, Transportation, GIS, Geomatics and Growth Management. CivilSurv is the successor and continuation of the Lakeland and Stuart Divisions of Keith and Schnars, P.A. that were established in 1980. Our Tradition of Innovative Engineering is provided from modern state-of-the-art offices in Lakeland, Port St. Lucie, Sebring and Jacksonville. We are opening Bradenton and Vero Beach offices in the Spring of 2011. Our clientele includes City and County governments, State agencies, utility companies,

commercial and industrial firms, private developers, architects, attorneys and contractors. Demonstrating our decades of commitment to diversity in the workforce, we are a Woman-Owned business enterprise (Florida Certified WBE and SFWMD Certified SBE).

4. *Experience on Similar Projects (Maximum of 15 Points):* Provide examples of similar work experience for the Proposer and Sub-consultants. In all illustrations of experience, indicate:

- **Client (contact person, address & telephone numbers)**
- **Year completed**
- **Total cost of Proposer or Sub-consultant contract**
- **Change orders–include reasons and changes to contract amount and time**
- **Nature and extent of the work performed**
- **List individuals on the team that worked on the project and indicate their role on the project**

[See Standard Form 330]

5. *Key Individuals (Maximum of 10 Points):*

- **Names and resumes of the key individuals assigned to project**
- **Identify the roles that the key individuals will fulfill for this project.**
- **Identify the percent of time that the key individuals will work on this project**
- **Provide a list of at least three references for each of the key individuals**
- **State that key individuals, identified in this proposal, will be available for and assigned to this project.**

* For Key Individuals resumes, see Standard Form 330.
* Key Individuals, identified in this proposal, will be available for and assigned to this project.

Key Individuals - Table 5.1

Name	Role	Avail.	Reference Name	Reference Title	Reference Number	Reference Email
Michael L. Davis	Principal-In-Charge	15%	Michael Busha	Director, Treasure Coast Regional Planning Council	772-221-4060	mbusha@tcrpc.org
			Stuart J. Applebaum	Operations Leader, ARCADIS	904-721-2991	stuart.applebaum@arcadis-us.com
			Christine Hurley	Monroe County, Growth Management Director	305-289-2517	Hurley-Christine@MonroeCounty-FL.Gov
Mark Moshier, P.E.	QA/QC Design	5%	Johnny Martinez, P.E.	Miami-Dade City Manager	305-416-1025	johnnymartinez@miamigov.com
			Mark Croft, P.E.	FDOT District 6 - District Construction Engineer	305-499-2365	mark.croft@dot.state.fl.us
			Richard Tornese, P.E.	Broward County Engineer	954-577-4579	rtornese@broword.org
Bryan Wilson, P.E.	Project Manager	80%	Anson Sonnett, P.E.	FDOT District 4 - Consultant Project Manager	954-777-4474	anson.sonnett@dot.state.fl.us
			Donovan Pessoa, P.E.	FDOT District 4 - Consultant Project Manager	954-777-4442	donovan.pessoa@dot.state.fl.us
			John Olson, P.E.	FDOT District 4 - Consultant Project Manager	954-777-4452	john.olson@dot.state.fl.us

Mark Kline, P.E.	Lead Roadway Engineer	50%	Joy Tracy Puerta	City of Boca Raton, Transportation Analyst	561-416-3410	jpuerta@ci.boca-raton.fl.us
			Earl Prizlee, P.E	City of Ft. Lauderdale Public Works - Project Engineer	954-828-6522	EPrizlee@fortlauderdale.gov
			Juan Bowles, P.E.	FDOT District 4 - Consultant Project Manager	954-777-4465	juan.bowles@dot.state.fl.us
Matt Neddeff, P.E.	Lead S&PM/ Utility Coordination	60%	Anson Sonnett, P.E.	FDOT District 4 - Consultant Project Manager	954-777-4474	anson.sonnett@dot.state.fl.us
			Brent Lee Shue Ling	FDOT District 4 - District Pavement Design Engineer	954-777-4075	Brent.Lee-Shue-Ling@dot.state.fl.us
			Otis Keeve	ATT Utility Coordinator	954-723-2540	ok1184@att.com
Coriann Salas, P.E.	Lead Structural Engineer	80%	Fred Ochoa, P.E.	FDOT District 4 - District Structures Engineer	954-777-4639	fred.ochoa@dot.state.fl.us
			John Danielsen, P.E.	FDOT District 4 - District Bridge Maintenance Engineer	954-777-4644	john.danielsen@dot.state.fl.us
			Hailing Zhang, P.E.	FDOT District 6 - Assistant District Structures Engineer	305-470-5484	hailing.zhang@dot.state.fl.us
Barbara Russell, P.E.	Structural Engineer	90%	Fred Ochoa, P.E.	FDOT District 4 - District Structures Engineer	954-777-4639	fred.ochoa@dot.state.fl.us
			Hailing Zhang, P.E.	FDOT District 6 - Assistant District Structures Engineer	305-470-5484	hailing.zhang@dot.state.fl.us
			Jorge Rodriguez, P.E.	FDOT District 6 - District Structures Engineer	305-470-5444	jorge.rodriguez@dot.state.fl.us
Jonni Joannou, P.E.	Structural Engineer	90%	John Danielsen, P.E.	FDOT District 4 - District Bridge Maintenance Engineer	954-777-4644	john.danielsen@dot.state.fl.us
			Francis Lewis, P.E.	FDOT District 4 - District Drainage Engineer	954-777-4146	francis.lewis@dot.state.fl.us
			Peter Nissen, P.E.	New Millennium - Senior Project Manager	561-655-0655	pnissen@nmdceng.net
Robert Woodruff, P.E.	Structural Engineer	10%	Leigh Bennett, P.E.	FDOT District 2 - Consultant Project Manager	386-961-7451	leigh.bennett@dot.state.fl.us
			Craig Teal, P.E.	FDOT District 2 - Consultant Project Manager	386-961-7703	craig.teal@dot.state.fl.us
			Fred Ochoa, P.E.	FDOT District 4 - District Structures Engineer	954-777-4639	fred.ochoa@dot.state.fl.us
Chris Jackson, P.E.	Lead Drainage Engineer	35%	Francis Lewis, P.E.	FDOT District 4 - District Drainage Engineer	954-777-4146	francis.lewis@dot.state.fl.us
			Georgi Celusnek, P.E.	FDOT District 4 - Drainage Engineer	954-777-4368	georgi.celusnek@dot.state.fl.us
			James Poole, PE	FDOT District 4 - Drainage Engineer	954-777-4639	james.poole@dot.state.fl.us

Jeff Glenn, P.E.	Lead Hydraulic Engineer	30%	Pat Muench, P.E.	FDOT District 5 - District Drainage Engineer	386-943-5434	patrick.muench@dot.state.fl.us
			Ferrell Hickson, P.E.	FDOT District 5 - Assistant District Drainage Engineer	386-943-5433	ferrell.hickson@dot.state.fl.us
			Jonathon Moody, P.E.	Thirsty Duck, LTD Vice President	727-376-2400	jmoody@thirsty-duck.com
Bruce Reed, RLA	Landscape Architect	50%	Craig James	FDOT District 6 - District Environmental Administrator	305-470-5221	steven.james@dot.state.fl.us
			Paul Moss	FDOT District 6 - District Landscape Architect	305-470-5384	paul.moss@dot.state.fl.us
			Tony Puerta	City of Boca Raton - Project Manager	561-416-3402	tpuerta@ci.boca-raton.fl.us
Robert Krisak, P.L.S.	Survey & Mapping	35%	Luke DeBrock	Waste Management	954-984-2000	ldebrock@wm.com
			Marco Garica	Moss & Associates	954-397-4540	mgarica@mossmail.com
			Randy Koper. R.L.A.	Miami-Dade County Park and Recreation Department	305-755-7860	rkpk@miamidade.gov
Eric Wilhjelm, P.S.M.	Survey & Mapping	35%	Bill Arata, P.S.M.	FDOT District 4 - Surveying and Mapping Project Manager	954-777-4586	william.arata@dot.state.fl.us
			Scott Perkins, P.S.M.	FDOT District 6 - District Surveyor	305-470-5194	scott.perkins@dot.state.fl.us
			Jeff Smith, P.S.M.	FDOT District 4 - District Surveyor	954-777-4560	jeff.smith@dot.state.fl.us
John Abbott, P.G.	Lead Environmental	40%	Joy Tracy Puerta	City of Boca Raton, Transportation Analyst	561-416-3410	jpuerta@ci.boca-raton.fl.us
			Heath Norman	Project Manager, H&R of Belle Glade, Inc	561-996-4127	Heath@HandRBG.com
			Mayté Santamaria	Monroe County, Assistant Director of Planning and Environmental Resources	305-289-2500	Santamaria-Mayte@MonroeCounty-FL.Gov
Joyce Howland	Lead Permitting	40%	Carlos deRojas, P.E.	South Florida Water Management District, Section Leader	561-682-6505	cderojas@sfwmd.gov
			Mike Pacitto, P.G.	Broward County Aviation Dept, Environmental Compliance Manager	954-359-6103	MPPACITTO@broward.org
			Tanya Wilson-Sejour, AICP	City of North Miami, City Planner	305-895-9826	tsejour@northmiamifl.gov

6. Location of Work (Maximum of 5 Points): **List the locations of the Proposer and Sub-consultant offices where work for this project will be accomplished and indicate the type of work to be completed in each office.**

Name	Location	Type of Work
Keith and Schnars, P.A. Crosstown Parkway Extension Project Office	**521 NW Enterprise Drive Port St. Lucie, Florida 34986**	**Project Management, QA/QC, Landscape Architecture, Roadway Engineering, Signing and Pavement Marking, Structural Engineering, Surveying, Mapping, Environmental Engineering, Permitting, Public Involvement, Utility Coordination**
Keith and Schnars, P.A.	6500 North Andrews Avenue Fort Lauderdale, Florida 33309	Project Management, QA/QC, Landscape Architecture, Roadway Engineering, Signing and Pavement Marking, Structural Engineering, Surveying, Mapping, Environmental Engineering, Permitting, Public Involvement, Utility Coordination
Reynolds, Smith & Hills, Inc.	3125 West Commercial Boulevard, Suite 130 Fort Lauderdale, Florida 33309	Drainage, Hydraulics
Reynolds, Smith & Hills, Inc.	10748 Deerwood Park Boulevard South Jacksonville, Florida 32256	Structural Engineering, Peer Review
GFA International, Inc	521 NW Enterprise Drive Port St. Lucie, Florida 34986	Geotechnical Engineering
Geologistics, Inc.	9045 La Fontana Boulevard, Suite 233 Boca Raton, Florida 33434	Geotechnical Engineering
I.F. Rooks & Associates	106 NW Drane Street Plant City, Florida 33563	Ariel Photography
Construction Engineering Consultants	3800 North 29th Avenue Hollywood, Florida 33020	Constructability
Electrical Design Associates	5300 West Atlantic Avenue, Suite 408 Delray Beach, Florida 33484	Lighting
Archeological Consultants, Inc.	8110 Blaikie Court, Suite A Sarasota, Florida 34240	Archeology
Bernard Kinney Associates	2445 Dyer Road Port St. Lucie, Florida 34952	Noise Impacts
F.R. Aleman & Associates	10305 NW 41st Street #200 Doral, Florida 33178	Surface Utility Engineering
CivilSurv	2400 Rhode Island Avenue Fort Pierce, Florida 34950	Hydrographic Surveying

***7. Project Approach (Maximum of 25 Points):* Demonstrate your understanding of this project. Provide a description of the Proposer's approach to providing the required services. Provide a description of innovative concepts proposed to enhance value, quality and to control cost and schedule.**

PROJECT APPROACH

Understanding of Project Scope. In 2004, the City of Port St. Lucie (City) had the distinction of being the fastest growing city in the nation. In 2005, the City remained in the top five nationally in terms of growth. Originally planned as a retirement community, the City is experiencing substantial problems with traffic congestion, including the two existing North Fork St. Lucie River (NFSLR) bridges within the City.

The proposed Crosstown Parkway Corridor Extension Project (formerly known as the Third East-West River Crossing) is to extend the Crosstown Parkway from west of Manth Lane across the NFSLR to U.S. 1, a distance of approximately 2 miles. The six lane divided highway and bridge will serve multi-modal transportation alternatives, including automobile, bicycle, pedestrian, and public surface transportation.

The purpose of the proposed project is to alleviate severe traffic capacity deficiencies in the City by providing relief to the NFSLR crossings at Port St. Lucie Boulevard and Prima Vista Boulevard. To address this problem the City has conducted a Project Development and Environment (PD&E) Study and Environmental Impact Statement (EIS) to evaluate a third crossing over the NFSLR at the Crosstown Parkway. The EIS evaluated numerous alternative alignments and a preferred alternative, Alternate 1C, has been selected as the best alignment to minimize impacts to residents and the environment while maximizing traffic operations in the corridor.

Keith and Schnars (K&S) is the lead consultant for the PD&E and the EIS. In spite of the controversial nature of the project, K&S has successfully worked through challenges associated with sensitive environmental resources, State ownership of the project lands and multiple layers of reviews by transportation, regulatory and resource agencies. The K&S team understands fully this project and its importance to the City. The K&S team will provide the City the most efficient and effective transition from the study phase to the design phase and into the construction phase. The K&S team will ensure that all regulatory commitments are met, ensuring that construction is completed on time, if not ahead of schedule. And, the K&S Team has a decade's long record of an unequivocal commitment to serving the City.

Project Management Approach. The K&S Team's approach to management of the Crosstown Parkway Extension design project is based on the following key principles:

- Assigning an experienced and dedicated project team;
- Commitment to project schedule, budget and quality controls;
- Optimization of roadway and bridge design;
- Recognition and prioritization of City's desires and concerns;
- Reduction of project costs;
- Commitment to local presence and availability of lead project staff; and
- Focus on compliance with EIS and regulatory commitments.

Experienced and Dedicated Design Team

The K&S Team will provide the City with the most experienced and dedicated team for completing the Crosstown Parkway Extension design. K&S has carefully handpicked each team member, including subconsultants.

The K&S Teams roadway and bridge experience is extensive and includes:

- The Evans Crary Bridge (FDOT D4)
- Becker Road/I-95 Interchange (City-FDOT D4)
- Crosstown Parkway/I-95 Interchange (City-FDOT D4)
- The Indian Street Bridge (FDOT D4)

- Frank A. Wacha Bridge/ICC in Jensen Beach (FDOT D4)
- Andrews Avenue Extension and Bridge (FDOT D4)

The K&S Team has unmatched knowledge of not only the Crosstown Parkway corridor but also the cultural, economy and natural environment of the City. We have added key sub-consultant partners like Reynolds, Smith and Hills (RS&H), GFA International, CivilSurv, bridge constructability expert Mike Bone, P.E. and others to further enhance our team's technical expertise and local knowledge.

RS&H will utilize recent **experience gained in the design of the Indian Street Bridge** design-build project in Martin County to optimize the bridge and drainage design and permitting efforts. RS&H will perform independent QA/QC on the bridge design. Similarly GFA's wealth of experience in the predominant soil conditions in east St Lucie County will prove invaluable. The addition of CivilSurv to our team will double the number of survey crews available to attack the topologic and hydrologic survey efforts that are the key element of phase I of the project. Mike Bone, P.E., a bridge construction expert, will work with our bridge design team to ensure that our design can be constructed in the most cost effective manner consistent with regulatory requirements. Mr. Bone is currently **part of the construction inspection team on the Indian Street Bridge project.**

There are many agencies and stakeholders involved in the development of the Crosstown Parkway project: the Federal Highway Administration (FHWA), Florida Department of Transportation (FDOT) and several federal and State regulatory and resource agencies, including the Florida Department of Environmental Protection (FDEP) that owns the property where the project will be constructed. In addition, local environmental advocates and City residents have a keen interest in how the project is designed and constructed. K&S will continue to operate as the City's advocate in dealing with the agencies and key project stakeholders, ensuring that the City's twenty-five year vision for the corridor is met.

An integral part of the success of any project is the selection of the Project Manager (PM). In fact, the PMs role in the execution of the project is perhaps the most critical element to a successful project. The project manager's primary role is to provide day-to-day leadership, direction and set an aggressive but inclusive project schedule. The PM must then take the responsibility to gather and allocate the appropriate resources to the critical elements of the schedule to ensure they are completed on time or **AHEAD OF SCHEDULE** and developed to the highest level of quality attainable.

K&S has selected Bryan Wilson, P.E. as the PM for the Crosstown Parkway Extension Design Project. Mr. Wilson brings to the Team and the City 26 years of transportation design experience, including nine years with FDOT District 4. Bryan will be the K&S Team principal contact person for the City and will work directly with the City's PM, Ms. Roxanne Chesser. The K&S PM and other key Team members will work with the City PM and staff to ensure a singular vision for the project - - including schedule and quality of work. The K&S PM, Principal Michael Davis, and key Team members will be available to the City PM, City Engineer, City Manager and City Council as necessary.

The K&S PM will be supported by an experienced and talented team of engineers, environmental scientists, surveyors and other professionals. The **K&S bridge design group will be led by Coriann Salas, P.E.** Ms. Salas is supported by four other K&S professional bridge design engineers, including Jonni Joannou. P.E., formerly FDOT District 4 Assistant Structures Engineer, who brings 50 years of bridge design experience. The **roadway design group will be led by Mark Kline, P.E.** who brings over 28 years of roadway design experience to the Team.

As reflected in the enclosed organization chart, the K&S design team includes registered professionals for each discipline who were heavily involved in the Crosstown Parkway Extension EIS development, providing project specific experience and unprecedented familiarity with the key individuals at the City, FDOT, FHWA, St Lucie County, South Florida Water Management District, Army Corps of Engineers, FDEP and other permitting agencies. Our Team's experience working with these and other key stakeholders in the Crosstown Parkway Corridor provides the City great advantages and will facilitate a cost effective and successful project.

Team Approach. K&S understands that the Crosstown Parkway Extension Design project will require effective project management and a coordinated team of experienced professionals from many disciplines. The K&S Team success will result from its experience, dedication and relationships with its Team members and the City. In short, K&S knows that this project requires a partnership between K&S, its subconsultants, FDOT and most importantly the City.

Coordination/Relationship with Sub-consultants. The top priority on all K&S projects is to ensure that our team maintains close and continuous coordination with our client and all sub-consultant team members. K&S has worked on multiple previous projects with our subconsultant partners and has developed outstanding communication and trust between the firms. It is K&S' sole responsibility to make sure that our sub-consultants comply with their schedule and produce the highest quality deliverables. As the prime consultant, K&S wwill coordinate closely with subconsultants to ensure that they have the information necessary and a full understanding of schedules and commitments.

To further ensure efficient and effective communication between the City and the K&S Team, **K&S has made arrangements to reopen its Port St. Lucie Office.** The K&S PM, Senior Bridge designer, Principal-in-Charge and other key team members will staff the office and be available on short notice from the City.

Commitment to Project Schedule and Budget

K&S is recognized by FDOT as one of its top design and construction management consultants when it comes to meeting schedules and budgets. Unlike the PD&E and EIS phase which is often dictated by externalities beyond the control of the City or consultants, the design phase of such projects is much more predictable and internally managed by the consultant. **The K&S Team is committed to exceeding the City's schedule and budget expectations** for the design phase of this project. The Team's extensive experience with the project will allow us to jump start the survey and design unlike any other team.

Control of Project Schedule. It has been our experience that conducting weekly internal project progress meetings is essential to ensuring that the project schedule is being met and to highlight areas of concern that require additional resources to resolve. It has been our practice to give the City PM weekly or bi-weekly updates on the project status and to alert the City as soon as challenging project issues emerge. We also strive to deliver interim submittals at least 30 days in advance of the scheduled submittal date and deliver production complete submittals at least 60 days in advance of scheduled dates.

Based on our review of the Scope of services we believe this schedule may present opportunities to reduce some design event durations. While meeting scheduled production submittal dates is extremely important, it is also paramount to adhere to all other project milestone dates as well. Elements such as scheduled permit submittals, utility notification dates and geotechnical report submittals must be adhered to in order that monthly progress reviews show no slippage when compared to the approved project schedule. It is the K&S PM's responsibility to inform the City's PM of any issues and provide a plan to overcome any "negative float" that may develop in the schedule.

Control of Project Budget

Design Budget Controls. K&S will utilize the project accounting features of our internal accounting software to track project budgets and "percent complete" status for each design task. This information will be detailed in the monthly progress reports forwarded to the City's PM. We will develop a comprehensive scope of work based on our extensive design experience in the corridor. This will help avoid future supplemental agreements. The budget control, costs and any potential supplemental agreements will be discussed in our monthly progress reports thus assuring that project progress is commensurate with the project invoicing. Additionally, the K&S Team provides the City unequaled design experience in the Crosstown Parkway Corridor. The K&S Team will make full use of this experience to develop the most efficient and constructible design - - saving time and money.

Construction Budget Controls. Our project team will update the Engineer's estimate and the FDOT's Long Range Estimate (LRE) as required at the following milestones: 1) After the NTP 2) 30% Plans submittal 3) 100% Plans submittal and after any scope changes. K&S will also prepare an independent Engineers' cost estimate to help detail predicted construction costs and identify items for potential unit price overrides and track items identified in the Risk Analysis Report.

Quality Control Process. Quality control and quality assurance is part of the K&S DNA. We understand that each product we produce is a reflection of the professionals that produce it - - and we take QA/QC seriously. In this regard, we have organized the K&S Team to include key QA/QC members. K&S Vice President and Principal Mark Moshier, P.E. will lead the QA/QC team. This QA/QC team includes bridge design experts from RS&H and bridge constructability expert Mike Bone, P.E.

The fundamental requirement for developing a quality set of plans and CADD files is time. That is, the schedule must be set such that there is ample time for the Design Team's quality control process to occur and there must be ample time provided for FDOT's Quality Assurance process to proceed. This makes it imperative that the design submittals be completed ahead of the City's schedule to allow for thorough and independent checking of the design plans and calculations. First, the schedule must be set such that the QC/ QA process occurs subsequent to plans development and not simultaneously with plans development. Second, independent QC review personnel shall not be directly involved in design process. Our process focuses on three major categories of review: 1) Design criteria compliance review 2) Plans preparation review and 3) Constructability review.

The K&S Team QC Process includes the following steps:

1) Design originator checks work;
2) Work sent to a QC checker;
3) Sent back to the originator who reviews comments;
4) Originator and QC checker meet to discuss the comments;
5) Comments are implemented; and
6) Plans are back checked.

All of these steps will require a reviewer's initial and date on a Quality Control Stamp by the designer or drafter involved.

Optimization of Roadway and Bridge Design

Technical Approach to Project

The main elements of a final design solution for the Preferred Alternative will consist of: 1) developing a final roadway alignment and profile for the corridor; 2) design of the proposed bridge structure over the NFSLR; 3) development of the final drainage design, pond configuration; and 4) environmental permitting of the proposed roadway, bridge and associated drainage systems.

The proposed centerline alignment will follow the Preferred Alternative as prescribed in the EIS documents. This alternative is the most direct extension of the Crosstown Parkway to U.S. 1 and has been shown on the City's Comprehensive Plan since 1980. This alignment is 10,250 feet (1.94 miles) long and requires a bridge structure 4,014 feet long. Intersection improvements will be required at Floresta Drive and US-1.

Roadway Design Criteria

The design controls and standards used to develop the proposed typical sections and roadway improvements are primarily the Manual on Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways, State of Florida, 2011 (Florida Greenbook) and A Policy on Geometric Design of Highways and Streets, American Association of State Highway Transportation Officials (AASHTO), 2004. The Crosstown Parkway corridor is classified as an urban major arterial with a design speed of 45 mph.

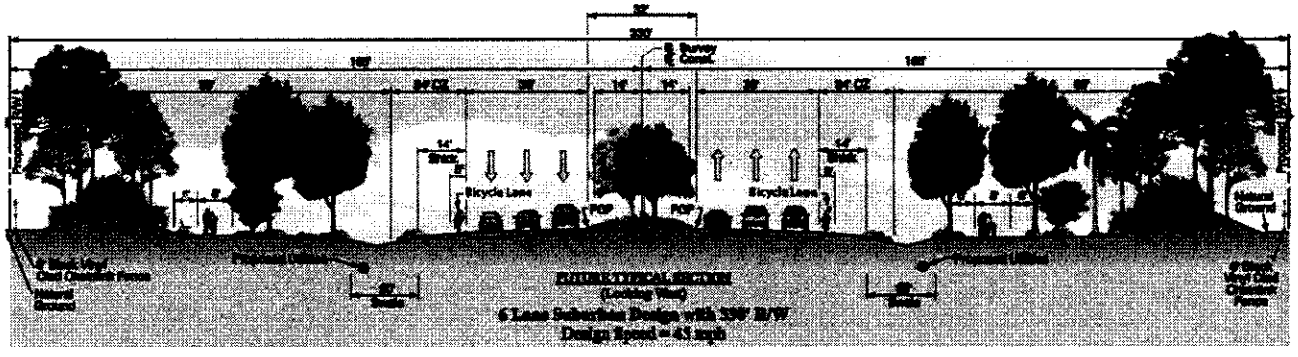
Typical Sections

Three typical sections are proposed for the corridor:

West of the NFSLR. The first section is an extension of the existing six-lane suburban section with linear parks west of the NFSLR from Manth Lane to east of Floresta Drive. The suburban section consists of a six-lane roadway section with three 12-foot travel lanes and a 14-foot outside shoulder (5-foot paved) with designated bike lane in each direction, separated by a raised 32-foot raised landscaped median with type F curb and gutter. The proposed ROW width for the typical section varies between 280-feet and 330-feet. Linear parks are proposed along both sides of the roadway in the area from west of Manth Lane to the River and are a critical feature of the proposed project.

The land use along the proposed corridor is predominately residential and the construction of this proposed corridor bisects the existing residential communities. The City can leverage the roadway project to add recreational amenities. For example, the **K&S Team will explore the desirability of a small pocket park or community garden** in the area adjacent to the western touchdown of the new bridge. Further, the linear park feature serves to buffer the adjacent residents from the impacts of a new six-lane roadway. Additionally, the linear park concept serves to:

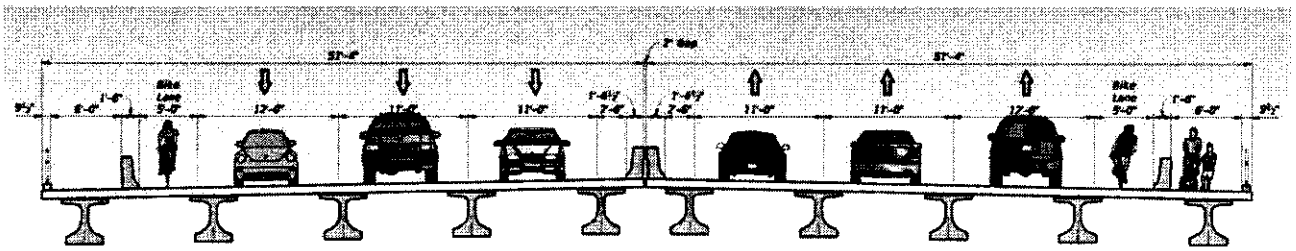
- Buffer the remaining homes (specifically, the back yards) from the visual impacts of the new roadway
- Provide some level of noise reduction to the remaining residents by increasing the distance from the noise source and through the installation of earthen berms.
- Eliminate the need for partial takes of residential property, which generally results in an undesirable minimal front yard area, thus reducing curb appeal of the property, which can ultimately lead to blighted properties along the roadway.
- Eliminate the conflict of multiple driveway openings along the corridor, which would impede traffic flow and create multiple conflict zones within the corridor.
- Eliminate the potential land use changes resulting in commercial properties being constructed along the corridor adjacent to the residential areas.
- Create a signature "parkway-like" roadway within the City.
- Provide enhanced multimodal opportunities within the City through the construction of an eight-foot wide sidewalk for pedestrians, bicyclists and others.
- Create a new park to link the remaining neighborhoods, thus lessening the impact of the intrusion of a six-lane divided roadway.



The portion of the roadway corridor from just east of Floresta Drive to the west end of the bridge will serve to transition the roadway from the suburban typical section to the urban bridge section. The suburban typical will extend approximately 900-feet east of Floresta and the median width will transition from 32-feet down to 8.25-feet on the bridge. The transition will be accomplished over a minimum of 540-feet on the approach to the bridge to allow the bridge to maintain a minimum width across Coral Reef Drive and the natural areas abutting the river. The minimal 8.25-foot median width will be maintained on the bridge east to a point just west of the east end of the bridge where the two adjacent bridge structures will diverge over 540-feet to tie in to the 30-foot roadway median between the east end of the bridge and US-1.

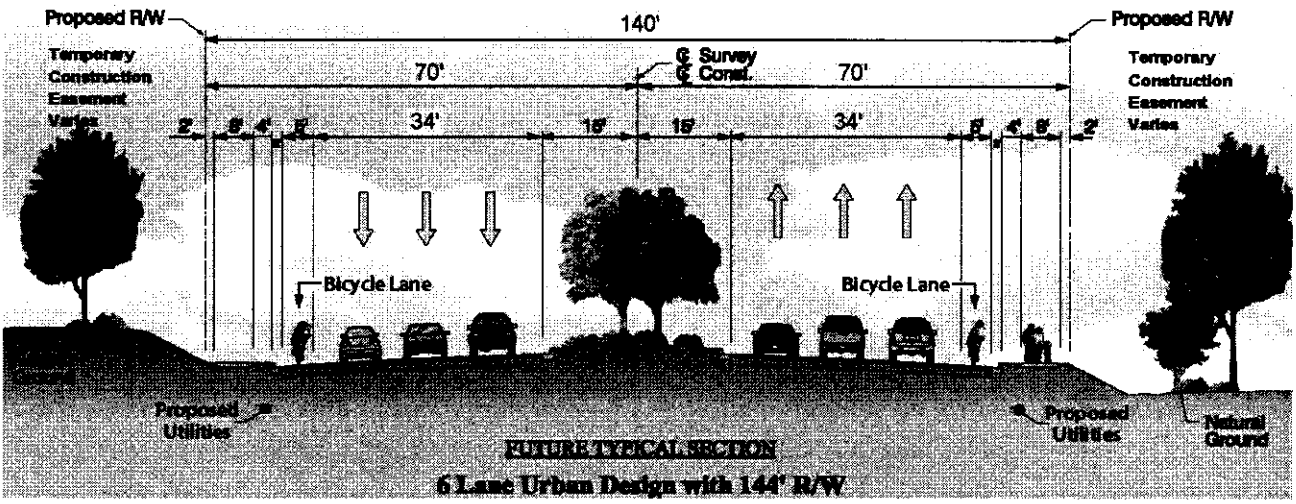
Crossing the NFSLR. As part of the EIS, K&S developed a modified bridge section that reduced impacts to wetlands and State owned park land. This **reduced urban bridge section also serves to reduce construction costs,** simplify bridge construction and reduce impacts to the environmentally sensitive areas caused by construction activities.

The **103' Bridge typical section** as proposed by the K&S Team will be an urban section and will consist of two 11-foot lanes and one 12-foot outside lane in each direction with a 2.5-foot inside shoulder, a 5-foot outside shoulder and 6-foot sidewalks.



103' URBAN BRIDGE TYPICAL SECTION

East of the NFSLR. From the east end of the bridge to US-1 the roadway will consist of a six lane urban typical section with two 11-foot lanes and one 12-foot outside lane in each direction, separated by a 30-foot raised grassed median with type F curb and gutter. The proposed ROW width for the typical section is 140-feet. This reduced urban section will serve to ease tie in of the reduced bridge typical to the roadway section east of the river as well as reduce impacts to the environmentally sensitive areas between the river and US-1.



Innovative Roadway Design Concepts. The K&S roadway design staff has successfully developed optimized roadway and bridge typical sections that maintain adherence to minimum Florida Greenbook design criteria while reducing impacts to environmentally sensitive wetlands and upland park land (4f impacts). This effort by K&S also reduced estimated construction costs by approximately 20 million dollars.

The **reduction in bridge and roadway typical section widths will also significantly reduce the amount of projected stormwater runoff** from these areas, reducing the treatment volumes required to be provided in proposed treatment ponds. This will be particularly useful in downsizing the required modifications to the existing pond areas in the joint use Liberty Medical Center Ponds. We are keenly aware of the City's desire to develop a plan for the areas under the bridge adjacent to Coral Reef Drive and the NFSLR as a park like area and to enhance pedestrian and bicycle access recreational opportunities that might be provided in this area and along the approaches to the bridge Our design modifications will allow the City to take advantage of the additional green space area provided by constructing the transitions from sub urban to urban typical sections along the west approach to the bridge. As noted above, this will allow for consideration of a small pocket park or community garden on the western side of the NFSLR.

Bridge Design

The design and construction of the NFSLR bridge is the critical item of this project. As such, it is vital to the City to have a team that not only has bridge design experience but also has a high level of understanding of the history of the project and the substantial environmental constraints. The K&S Team is that team.

The K&S structural design team consists of seven structural engineers with over **125 years of bridge design experience.** This experience ranges from continuous highly skewed steel plate and steel box girder bridges to prestressed concrete beam bridges. One project of note is the award winning, high-level Evans Crary Sr. Bridge, which is over 3000-feet long having a vertical clearance of 65-feet crossing over the St. Lucie River. To add further depth to our Team, we have RS&H who also has a highly capable structural department who has recently designed the Indian Street Bridge over the South Fork of the St. Lucie River, in Palm City. Mr. Robert Woodruff. P.E. will head up the **RS&H structural group to assist in QA/QC and a peer review of the bridge design.** Mr. Mike Bone, P.E. will also assist the Team to **ensure the constructability of the bridge in accordance with the EIS** and permit conditions.

Our structural team provides in depth local knowledge to the City given our work on the Crosstown Parkway Extension EIS, the Crosstown Parkway and Becker Road/I-95 Interchanges and the numerous other projects K&S has done for the City. Because of our work on the EIS, we are **intimately familiar with the key issues and challenges and understand the importance of the project to the City** and its residents. In addition, the **K&S Team has initiated work on the required Bridge Development Report (BDR) and conducted a preliminary geotechnical assessment.** While incomplete at this time, **this work has given the K&S Team a good understanding of a basis of design.**

Since this RFP has been released, the typical section of the bridge has been reduced from the 143'-0" typical section noted in the RFP to the 102'-10" typical section agreed upon by FDOT and FHWA. As noted in the cross section above, the new typical section consists of two parallel structures, each consisting of one 12-foot lane, two 11-foot lanes, 1-foot 6 ½-inch wide inside traffic railing barrier, an 2-foot 6-inch inside shoulder, a 5-foot outside bike lane, 1-foot 6-inch wide traffic railing barrier, a 6-foot sidewalk with a 9 ½-inch pedestrian/bicycle railing. The parallel structures will have a 2-inch gap between the interior traffic railing barrier. The Preferred Alternative has a proposed bridge length of approximately 4,014 feet, a little over three-quarters of a mile long. All bridge bents located in the water will be oriented to avoid restriction of water movement and maximize the River's hydraulic section.

Innovative Structural Design Concepts. The **K&S Team design approach is to maximize repetitive span lengths,** a concept that may allow for prescasting for the project. Prefabricated bridge elements are often used with the specific purpose of accelerating bridge construction and reducing environmental impacts. Having **repetition in the design will create an economy of scale benefit - - saving time and money** during design and construction. During the BDR development, we will conduct a feasibility assessment in accordance with FDOT Plans Preparation Manual Chapter 26 to determine the advantages of the precast bridge option where partial or full precast bridges elements will be investigated.

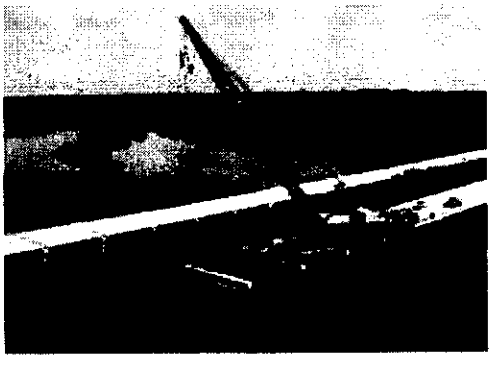
Still keeping costs in mind, there are context sensitive, cost effective ideas that can be incorporated into the bridge **design to add to the aesthetics of the bridge.** Railings may be the most visually prominent element of a bridge and can be modified to add aesthetic details. For example, the City intends for this Parkway to be a pedestrian and bicycle friendly route. This intent is demonstrated with the shared use paths found on the approach roadway and the sidewalk and bike lanes on the bridge. To increase the pedestrian enjoyment, pedestrian outlooks on the bridge is a concept that would add appeal and interest to the structure. As we proceed to final design, our Team can work with the City to consider the placement of small pedestrian outlooks strategically on the bridge without adding impacts to natural resources. The pedestrian/bicycle railing can include decorative inlays or colors that add to a "theme" and a more personalized bridge for the City.

Considering Bridge Construction Methods During Design Generally speaking, construction techniques rarely factor into the structural design of projects involving conventional construction methods. However, one of the **commitments made in the EIS is to employ a Top Down method** (including consideration of a trestle approach) of construction for the bridge in order to construct the bridge over the wetland areas without placing

equipment in environmentally sensitive areas such as wetlands and State Park land. The challenge is combining the design with the correct Top Down method. The optimal approach to the bridge construction will need to blend time-savings and cost-savings while maintaining all environmental commitments. Since the most advantageous design dependent on the construction method, our Team has Mike Bone. P.E., a 40 year veteran of the construction industry, to help advise them on the different methods and approach to construction.

To accommodate the environmental commitments made in the EIS, the following construction methods will be considered during the K&S Team bridge design:

True Top Down Construction Method (TDC), is where the bridge is built one span at a time from the previously completed span. This method precludes equipment below the bridge and the entire bridge is built from above. Typically, spans of up to 50-feet can be accomplished using this method.



TDC Advantages:

- Avoids the use of ground-based equipment and limits wetland disturbance.
- Uses conventional construction equipment.

TDC Disadvantages:

- Span lengths are limited. Spans of up to about 50 feet can be accomplished using a standard crane on tracks to drive the piles and place the beams. This increases the number of pile bents.
- Bridge component sizes may have to be increased due to construction loading.
- Due to curing time required on bridge components, construction time is increased. This can be mitigated with the use of precast elements.

The **Gantry Method (GM)** method of top down construction uses a specially designed gantry crane system such as a steel truss cantilevered out from the completed portion of the bridge to the span being constructed. Piles can be driven and beams can be placed with the same piece of equipment. Typically, spans of 50 – 150 feet can be accomplished using this method. Due to the costs of fabrication and delivery, this type of construction is economized on long bridges.

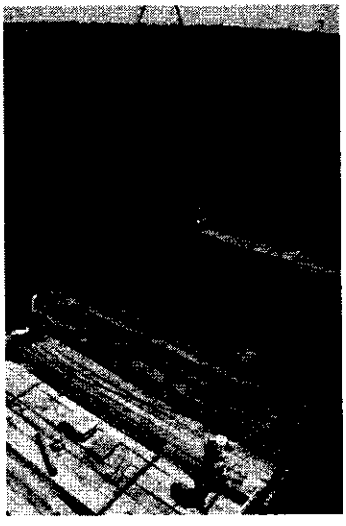
GM Advantages:

- Since the gantry does not bear on the bridge deck, there will be no increase in the size of the superstructure due to construction loads.
- Avoids the use of ground-based equipment and limits wetland disturbance.
- Larger spans minimize the quantity of substructure required, thereby lessening the permanent structure environmental impacts.

GM Disadvantages:

- Increases the project costs.
- Lead-time on custom gantry can extend construction schedule.

The **Trestle Method (TM)** of top down construction uses a temporary "platform" constructed next to the bridge in order to provide the crane with access to reach the necessary components of the bridge. Typically, spans of 50 – 150 feet can be accomplished using this method. The trestle is built top down by erecting the next span from the previous. Typically, a trestle is constructed using pipe piles for foundations and H-beams for caps and bracing. The deck of the trestle consists of crane mats, which are timber beams placed adjacent to each other perpendicular to the length of the trestle. The trestle is used as a platform to drive piles and place beams.



Trestles can run parallel to the bridge for its full length, or they can consist of a few spans that are "leap-frogged" as needed for bridge construction. They often have "fingers" that allow equipment closer access to individual piling.

TM Advantages:

- Since the crane does not bear on the bridge, there will be no increase in member sizes due to construction loads.
- Avoids the use of ground-based equipment and limits wetland disturbance.
- Larger spans minimize the quantity of substructure required, thereby lessening the permanent structure environmental impacts.
- Uses conventional construction equipment.

TM Disadvantages:

- A trestle is typically low to the ground so vegetation below the trestle would have to be removed before its' construction. Seen as a temporary impact.
- Increases the project costs.

Depending on the Contractors' approach, construction may also be accomplished by utilizing a hybrid method where components of both TM and GM techniques are included. If hybrid construction is pursued, the foundations can be placed using a smaller trestle than what would be required for the trestle technique discussed above. Once the foundations are installed, a beam-launcher, which is a gantry type rig, could be used to place the beams. After the beams are placed, the deck can be poured.

Span Arrangement Knowing that cost and schedule are important to the City; the K&S Team has performed an initial economic engineering analysis for the bridge using the new typical section for the Preferred Alternative. An economic engineering analysis is a component of the BDR to determine the layout of the most cost-effective structure. We have developed numerous structure cost matrices to establish the most economical span arrangement, i.e., minimum combined superstructure and substructure cost.

Since Top Down construction will be required to construct the bridge, our Team has used its industry knowledge to develop preliminary cost estimates for each Top Down construction method, TTD, GM and TM. We then factored these costs estimates and the construction method limitations into the structure cost matrices. To expedite both design time and construction cost on a bridge of this length, it is advantageous to design with repetition in mind. We approached the span arrangement to utilize the most similar span lengths as possible. From our analysis, the most effective superstructure type has been determined to be Florida I-beams (FIB). These beams utilize high concrete strengths and a large number of prestressing strands to result in long span capability and wide girder spacing.

Below we summarize our analysis findings using FIBs by method of construction.

TTD. From our research, the maximum span length that can be constructed using the TTD, are approximately 50-feet using FIB 36. This option does not satisfy the minimum horizontal clearance for the main NFSLR channel requirement found in the Scope of Services and has therefore been ruled out. While it is possible to use this approach on the non-channel portions of the project this would not provide for the most efficient design and construction and environmental and time impacts would be greater than GM or TM approaches.

GM and TM. These construction methods restrict span lengths to around 150-feet, which exceed the minimum horizontal clearance requirement found in the Scope of Services. Based on the existing local geotechnical information we have, **we believe that any spans less than about 100-feet will have loads that will allow for the use of pile bents on 24-inch piles.** Loads on spans greater than 100-feet will most likely need a substructure consisting of multi column piers with pile caps. Not only is the multi-column pier option more costly, but it also will have more wetland impacts. Economically and environmentally, pile bent substructure has the least impact.

The next cost consideration of the bridge is the superstructure and determining the cost effective span length 100-feet or less. **We have found that a span of approximately 80-feet using FIB 36 is the most economical**

option for beam layout. It maximizes span length with cost considerations. Using a 36-inch deep, FIB 36, will also keep a thinner looking structure and reduce shading on the surrounding areas as opposed to a deeper FIB.

Drainage Design

The project is located within the South Florida Water Management District (SFWMD) North St. Lucie Drainage Basin and traverses the NFSLR. In the vicinity of the proposed bridge crossing, the NFSLR also consists of the North Coral Reef Waterway, South Coral Reef Waterway, Evans Creek, and estuarine and palustrine wetlands that provide 100-year floodplain storage (Zones AE and X). The surface waters of the NFSLR fall within sovereign submerged lands, while the wetlands fall within Savannas Preserve State Park. The NFSLR is a State Aquatic Preserve and is designated an Outstanding Florida Water (OFW) by Chapter 62.302.700(9), F.A.C. The Florida Department of Environmental Protection (FDEP) has performed substantial water quality research on the NFSLR under the Florida Total Maximum Daily Load (TMDL) Program and designated this particular planning unit as WBID 3194, impaired for fecal coli form.

The existing drainage along the west side of the project limits can be divided into two main sub-basins, one consisting of the existing West Virginia Avenue right-of-way that conveys to the D-11 Canal prior to overflowing to the North Coral Reef Waterway and ultimately discharging to the NFSLR; and one consisting of the existing West Virginia Avenue right-of-way that conveys to the D-13 Canal prior to overflowing to the South Coral Reef Waterway and ultimately discharging to the NFSLR. On the east side of the project limits, between the NFSLR and US-1, the existing drainage conveys to Evans Creek via sheet flow and gulley flow, and ultimately to the NFSLR. Along US-1, the existing drainage consists of wide grassed swales and underdrains along the west side of the roadway, with a control structure (near the Village Green Drive intersection) that overflows to the NFSLR.

The **proposed drainage system for the project will be required to meet the requirements of the City and SFWMD.** The stormwater management facilities will provide attenuation of the increased runoff volume from the project, while also providing 150% of the required water quality treatment volume. In addition, since the project has greater than 40% impervious area and discharges to an OFW, the proposed drainage system will be required to provide one-half inch of dry detention or retention pretreatment as part of the required retention/detention.

According to the *Pond Siting Report and Preliminary Drainage Report* prepared by K&S during the PD&E Study, the proposed drainage will consist of a mix of open and closed drainage systems to convey runoff to wet and dry detention/retention ponds. Specifically, between Manth Lane and Coral Reef Street, runoff will be conveyed by proposed 20-feet wide grassed swales (located between the unpaved shoulders and sidewalks) to a proposed wet detention pond located between Alantus Avenue and West Virginia Avenue, east of Floresta Drive. Between Coral Reef Street and the apex of the proposed bridge, runoff will be conveyed by a closed bridge deck drainage system to proposed dry retention ponds located at the foot of the bridge. From the apex of the bridge to US-1, runoff will be conveyed by a proposed closed bridge and roadway drainage system into either a proposed dry detention pond located on the north side of the new roadway or within the existing wet detention pond located within the Liberty Medical Center property.

As part of our "fresh eyes" drainage approach, K&S Team member **RS&H will work closely with K&S and the City to optimize the proposed drainage design as necessary to minimize right-of-way and construction costs.** With the valuable experience gained as the lead design engineer for the Indian Street Bridge Design-Build Project in Palm City, RS&H has an unparalleled knowledge of the drainage, environmental, and permitting expectations that will be established by FDOT and SFWMD for this very similar project. Although the Indian Street Bridge project was heavily scrutinized by local opponents and deemed a project of Heightened Public Concern by SFWMD, RS&H was still able to successfully produce and deliver all construction plans, drainage documents, and environmental documents necessary to obtain a determination of complete application from SFWMD within just seven months of the Individual Environmental Resource Permit application submittal. We feel strongly that we can leverage that experience to gain even more efficiencies for the City on this project.

In terms of optimization, we believe there are **multiple opportunities available to reduce the offsite pond right-of-way requirements and related costs.** Along the west side of the project, between Manth Lane and Coral Reef Street, we observed that conservative depths to SHGWT elevations were used to determine the

minimum pond size requirements. It is highly likely that an additional foot of pond depth is achievable (which would result in less required pond area). As part of Phase I of the project, it will be critical to tie down a highly accurate gage of the SHGWT elevation as it slightly varies from west to east. Furthermore, we understand that the proposed typical sections provide an aesthetic greenway ambiance. However, this setting comes at the cost of significant storage opportunity within the proposed roadway right-of-way that could otherwise be utilized for dry retention/detention. Use of such area for drainage would not only enable the permit required one-half inch of dry pretreatment volume and lower maximum stages adjacent to the roadway, but would also offset the total volume and area requirements in the offsite wet detention pond. In addition, we recognize that the previous Pond Siting Report evaluated alternative pond sites for each alignment alternative. However, it did not evaluate multiple pond site alternatives for each system within each alignment alternative. We suggest validation of the identified pond site(s) as the preferred alternative(s) during Phase I of the project.

For the drainage system between Coral Reef Street and the apex of the bridge, we observed that the attenuation requirements were significantly exceeding the water quality treatment requirements. However, since the majority of this proposed sub-basin area (i.e. bridge footprint) is already impervious (consisting of water and wetlands), the actual attenuation requirements will be negligible. The proposed concrete bridge deck cannot generate more volume than the rainfall itself can produce. Therefore, within the bridge sub-basins, the downstream dry retention/ detention ponds will be controlled by water quality treatment requirements, which are significantly less and may reduce the required pond sizes along Coral Reef Drive.

Similarly, for the drainage system between the apex of the bridge and US-1, approximately half of this proposed sub-basin area is already impervious (water and wetlands). Therefore, the actual attenuation requirements will be much less than initially contemplated, resulting in less required pond size. In addition, we understand that a dry detention pond and joint-use wet detention pond are being considered for this sub-basin. However, we suggest the use of wet retention/detention rather than dry retention/detention in this basin due to prevalence of existing wetlands within the proposed pond site. It is highly unlikely that dry ponds would be effective in these low lying areas.

Furthermore, in the event that a joint-use wet detention pond within the Liberty Medical Center property is utilized, then we will develop a solution to ensure that the additional inflows from the project can be accommodated, while meeting minimum water quality and attenuation requirements for the combined site, and limiting maximum stages to elevations that do not adversely affect the existing, upstream Liberty Medical Center conveyance system and uplands site. K&S and RS&H are extremely familiar with the drainage, permitting, legal, and right-of-way processes which must occur with joint-use ponds. **In 2010, RS&H won several local, state, and national engineering awards and recognitions for its efforts on the I-595 Shared Use Drainage Project**, which involved treatment and attenuation of stormwater runoff from I-595 within three separate offsite (private) golf courses in order to avoid any right-of-way acquisition that would be needed for drainage for the $1.2 billion I-595 Corridor Improvements Project.

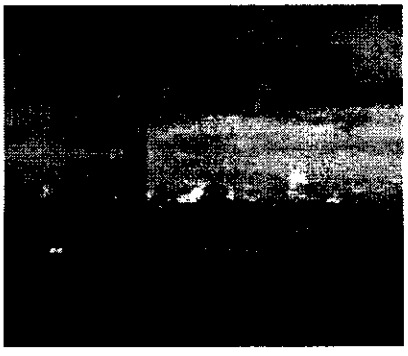
Lastly, we understand that the City has potential interest in utilization of the Thirsty Duck Buoyant Flow Control Device. RS&H has vast knowledge and experience with this device as it completed a study for Thirsty Duck, LTD in 2011 to demonstrate the volume savings made possible in a stormwater management facility by using a Thirsty Duck Buoyant Flow Control Device. RS&H is one of only four consultants in Florida that is listed on the Thirsty Duck website as having experience with design, analysis, and/or permitting of such installations.

Bridge Hydraulics and Scour

All bridge hydraulics and scour analyses, procedures, methodologies, and results will be compiled in the Bridge Hydraulics Report. This report will follow the requirements outlined in the FDOT Drainage Manual. Hydraulic conditions will be developed through application of the RMA-2 numerical model that was prepared by others as part of the FDOT District 4 Scour Evaluation. This effort involved bathymetry and 2-D hydraulic models for the entire coastal region within FDOT District Four. The model's coverage includes the North and South Forks of the St. Lucie River down to the confluence with the Indian River Lagoon. Simulations will include design hurricane storm surge and riverine runoff events. These simulations will indicate the maximum stages, flow rates,

and velocities during and after runoff events as well as storm surges. The design wave climate will be developed through the application of the SWAN wave model. The wave model inputs include the 100-year storm surge elevation, the 100-year wind speed, and the topography/bathymetry of the surrounding area. Estimating scour at the bridge involves application of standard HEC-18 and FDOT Scour Manual methodologies. Local scour will be estimated through application of HEC-18 and the Florida Scour Equations.

Geotechnical Design



Another challenge of the project is retrieving the geotechnical information needed for design without disrupting the natural environment with drill rigs. K&S Team member GFA, has extensive experience with performing geotechnical investigations in the most pristine environments including, SFWMD Conservation Areas, Jewfish Creek in Key Largo, Florida, Merritt Island Nature Preserve, Indian River Lagoon, Tibet Butler Preserve, and a list of others. GFA was selected because they conduct investigations with a high degree of environmental awareness with a minimal impact to the environment.

For this project an amphibious geotechnical drill will be used that can traverse in water and on land. This equipment is best suited for this project and has been utilized on other environmentally sensitive projects. We will traverse the bridge alignment footprint with this equipment and use silt booms at drill locations similar to the picture attached. We will utilize the NFSLR to gain access to the drill locations. GFA crew will be drillers experienced in working in environmentally sensitive areas that are also skilled in performing the deep borings required for the project deliverables.

Geotechnical services will typically involve five critical steps. First, preliminary field work must be done. The engineers will determine appropriate locations and depths for taking soil samples. Boring locations will include areas requiring geotechnical data.

The second step, exploration, will begin with drilling and recovering soil and rock samples using such techniques as standard penetration testing and wire line rock coring in accordance with FDOT standards. GFA drillers are versed in all these type of drilling techniques. A geotechnical engineer will take a series of soil samples from each defined boring location, paying special attention to recovered materials and penetrating resistance. If adjustments need to be made to the field sampling plan then the field engineer will make appropriate arrangements with the field crews after discussing this with the client.

Laboratory tests and sample review will be the third stage (materials testing). All soil/rock samples obtained by GFA in field investigations will be thoroughly examined visually in our laboratory in accordance with ASTM D-2488 to obtain an accurate definition of the geomorphic conditions and properties of the soil. Engineers will evaluate soil samples for strength, moisture, density and other characteristics and properties. Random laboratory tests will be performed on soils within the foundation bearing depths to verify visual classifications.

GFA will then develop final detailed boring logs, which depict the soils encountered. These boring logs will illustrate the soils encountered in graphic detail and penetration resistance values logged during drilling and sampling activities.

A geotechnical report is the fourth step in the process. It will provide a detailed analysis of subsurface conditions at the study location. How will existing subsurface soil and bedrock such as limestone or sandstone perform as bearing materials for the planned construction? What about soils that have been manipulated previously? What type of fill was used? Was it uncontrolled fill that has been dumped, but not compacted, or structural fill that has been compacted? Does the fill include buried debris? How can the contractor modify this material to ensure the load-bearing characteristics? As the final step, our team will then make the appropriate evaluations in order to make recommendations with respect to foundation support of the bridge structures; pile load capacities, soil bearing pressures; bearing elevations; and foundation design recommendations.

Noise Analysis. Our Team includes Port St. Lucie resident Mr. Bernard Kinney whose field of expertise is environmental acoustics. He will review the noise abatement commitments made in the EIS and re-evaluate the traffic noise model as required based on more detailed design. Based on the re-evaluation, noise barrier wall heights and lengths will be determined. **Mr. Kinney was part of the EIS noise modeling team.**

The K&S Team has extensive experience in noise barrier design. K&S has designed over seven different noise barrier projects throughout the State. Including the Value Engineering of the first FDOT noise barrier walls located in Broward County, which were later adopted as the FDOT State standard.

Surveying and Mapping. Both the **completion of a design survey and the production of a right of way maps demand the careful coordination of multiple survey tasks.** With only four months to complete the survey, efficient task scheduling and coordination are essential. Efficient task scheduling allows multiple tasks to be completed simultaneously. For example, after setting project control, multiple crews will perform the right of way survey, locating from west to east. By working in this manner, the **right of way calculations can begin while the surveying is still on-going.** K&S Team member CivilSurv was added to the team to provide hydrographic surveying and additional crews to ensure that the Phase I schedule is met.

A project surveyor will perform all major calculations concerning the existing alignments. As the design does not begin until the right of way maps are complete, the project surveyor must coordinate with the engineers to determine the final centerline alignment of the roadway. The alignment will be subject to a review by a senior surveyor before additional calculations can begin. Once the alignment is approved, the project surveyor will oversee the survey technician and cad technicians in the right of way mapping. As any right of way take will consist of the entire lot, the proposed right of way line will be mapped to the back of the lots. The senior surveyor and project surveyors will perform periodic reviews during the preparation of the maps; performing these reviews concurrently, rather than finally, minimizes the chances that an error will affect the schedule.

Environmental Permitting and Coordination

The EIS contains specific commitments to minimize environmental impacts. These commitments were made through extensive K&S negotiation's with State and federal agencies, and we understand they are not optional. Our overall **environmental approach is to honor those commitments by incorporating them into the design: fully and as intended.** Also, the proprietary and regulatory compensatory mitigation plans have already been negotiated through extensive coordination with the regulatory agencies and nothing in the design can undermine these plans.

Some of the commitments pertain to the design phase, others to the construction phase. Design-phase commitments include:

- Specialized equipment will be used during geotechnical/soil investigations in sensitive habitats to minimize impacts of drilling rigs. This may include such equipment as rubber tire mounted equipment, amphibious track rigs, rigs mounted on all-terrain vehicles, and tripod drill rigs.
- The design will honor the agreement to reduce the cross section over the aquatic preserve and state park lands from 143 feet to 102 feet 10 inches.
- The design will require a top down construction method, or construction methods from temporary platforms, trestles, or other similar methods, to avoid and minimize potential impacts to environmentally-sensitive resources.
- The bridge will be designed to bridge over the NFSLR and adjacent wetlands, minimizing fill on the east end through implementation of MSE walls.
- Bridge piers located in the water will be oriented to avoid restriction of water movement and to maximize the River's hydraulic section.
- Scuppers will not be used. All stormwater runoff will be directed to a drainpipe mounted below the bridge, which will convey runoff to the stormwater management system.
- The stormwater management design will include 150 percent of the required water quality treatment volume because the project will discharge into the NFSLR, an Outstanding Florida Water.

- Stormwater management systems (ponds) will be located within the right of way or within already developed areas to avoid additional impacts to wetlands or other sensitive habitats.
- The design will evaluate alignment or pile spacing adjustments to avoid or minimize effects on specific natural resources.
- The design will evaluate special structural design applications, which maximize the length of spans (and thus minimize the number of required pilings) such as pre-stressed concrete beams using high strength concrete and steel strands.
- The design will evaluate state-of-the-art construction methods, which maximize the length of spans (and thus minimize the number of required pilings) to include free-standing temporary work platforms; temporary work platforms using the permanent structure as support; specialized machinery, which uses the permanent structure as support; and various other methods including, but not limited to, prefabricated construction, jacking, and incremental launching procedures.
- The design will include specialized lighting fixtures to direct light onto the pavement (rather than lighting mounted on poles) to reduce light trespass into natural habitats and surrounding areas to the maximum extent practicable.
- Bridge abutments will be positioned to the maximum extent practicable outside of natural wetland and upland habitats to minimize fill impacts.
- The plans and specifications will identify the specific procedures for threatened and endangered species, including wood stork, gopher tortoise, West Indian manatee, bald eagle, Florida pine snake, gopher frogs, Eastern Indigo Snake, and smalltooth sawfish.
- The design will maintain wildlife corridors by allowing a clear path beneath the bridge to avoid separation of wildlife populations or seasonal migrations.

In addition to the above, the K&S Team will continue to identify and evaluate additional avoidance and minimization measures throughout the development of the design plans.

Environmental Permits

K&S has worked closely with all regulatory and resource agencies throughout the development of the EIS. Because of the effort expended on the front end of the EIS process, **we expect that the permitting phase will proceed in an efficient and streamlined manner.** The Conceptual ERP application, which includes the negotiated compensatory mitigation plan, provides the foundation for the permitting strategy. Coordination with the environmental permitting agencies will continue to be vital to this project. After the preliminary design features have been established to minimize impacts, we will meet again with USACE, SFWMD, FDEP, and USCG to discuss construction methodologies, environmental impacts, and permitting. This early design pre-application coordination effort will ensure that the permits will be processed in a timely manner and that the agencies' concerns are addressed fully in the initial application package. Following the agency meetings, the application packages will be compiled and submitted for processing. The permit application package must be complete and well organized to avoid confusion and misunderstandings. Vigilant monitoring of the process will preclude unnecessary delays in obtaining the required permits. K&S Vice-President and former federal wetlands regulator, Michael Davis, will lead this effort.

The listed permits and/or other actions from the following agencies will be required:

- USACE: Individual Permit for impacts to waters of the United States, including jurisdictional wetlands. The USFWS, EPA and NMFS will act as federal review agencies during the Section 404 permitting process. The K&S Team environmental and regulatory specialists will prepare the Environmental Resource Permit (Joint Application), including but not limited to the calculations of proposed dredge and fill impacts, the stormwater engineering design, drainage calculations, and wildlife assessment.
- SFWMD: Individual Environmental Resource Permit (ERP) for work in, on, or over wetlands or other surface waters as well as the management of stormwater. This will be included in the Joint Application. An ERP will also provide Water Quality Certification, as required by the Clean Water Act, Section 401.
- FDEP: authorization for construction or use on, over, or under submerged lands owned by the State. This authorization will be included in the Joint Application.

- USCG: A permit from the USCG will be required for the construction of bridges crossing the main channel of the NFSLR and the North Coral Reef Waterway. The USCG determined that Evans Creek qualifies for the advance approval category, so an individual bridge permit will not be required for Evans Creek.
- SFWMD: Water Use Permit for dewatering will be acquired. Although the dewatering permit is best acquired by the Contractor immediately prior to construction (when the means and methods of dewatering are known), SFWMD generally requires the Engineer to acquire the dewatering permit during the ERP process. In this case, the Engineer may make certain assumptions on the dewatering means and methods to obtain the dewatering permit, and subsequently the Contractor may need to modify the dewatering permit based on the Contractor's preferred means and methods.
- FFWCC: Relocation permit for gopher tortoises and their commensal species (to be acquired shortly before construction).
- FDEP: National Pollutant Discharge Elimination System (NPDES) permit (to be acquired by the contractor shortly before construction). The design team will prepare a comprehensive Stormwater Pollution Prevention Plan (SWPPP) to prevent and minimize erosion and the discharge of silt-laden construction waters into wetlands and surface waters.

8. *Time Commitment and Schedule (Maximum of 25 Points):* Provide a discussion of the Proposer's ability to perform in a timely fashion including the projected workload of key personnel assigned to this project. Provide a schedule that includes, at a minimum, the following milestones along with a discussion of how the Proposer and Sub-consultant's will ensure that these timelines are achieved using and anticipated award date of November 30, 2012.

- **Topographic and control survey for the proposed roadway – March 26, 2013**
- **Right-of-way mapping - March 26, 2013**

For projected workload of Key Individuals, see Table 5.1.

SCHEDULE

The City has worked diligently on the Crosstown Parkway project for decades. They have invested countless hours, many dollars and political capital in the project. The City has made completing the project a high priority. K&S has played an integral part in the Crosstown Parkway project to date - - planning and designing the interchange at I-95. K&S has also led the effort to complete the EIS for the Crosstown Parkway Extension. While the EIS has taken longer than the City anticipated and K&S would have liked, the reality is the EIS has proceed as quickly as any major transportation project of this nature. In fact, the Crosstown EIS is ahead of the national average for the time taken to complete a transportation EIS.

The K&S Team has the experience and commitment to meet or exceed the City's expectations for this design project. Our proven efficiency has been demonstrated to the City in the aggressive 22-month schedule K&S achieved while preparing the SIJR, PD&E and Final Design of both the Crosstown Parkway interchange and Becker Road interchange – at the same time.

As reflected in the schedule below, the K&S Team understands the Phased approach advocated in the RFP and the City's strong desire to complete this important project. In this regard, the K&S Team can reduce the City's design schedule because we have taken the initiative to get started using the information we generated in the EIS. Specifically, the K&S Team has already developed preliminary structural designs reflecting the most cost effective bridge typical section and substructure layout. Having these important issues already researched and analyzed allows the bridge design to proceed simultaneously with the roadway design to produce an entire 30% set of plans simultaneously. On a typical project, roadway design would reach 30% before bridge design could begin.

It is our intent to begin hydrologic mapping and upland topographic mapping (digital terrain modeling) simultaneously at Notice to Proceed. Our survey crews will be organized and ready to go on day one. Additionally, geotechnical investigation for the bridge substructure will proceed as soon as horizontal control is established. This will allow the maximum amount of geotechnical information to be delivered to the structures design team as soon as possible and greatly advance Initial bridge design and completion of the Bridge Development Report.

Further, our proposed schedule indicates that the K&S design team will commit to developing, reviewing and optimizing the roadway and bridge horizontal and vertical alignments (line and grade), and typical sections at our risk during the Phase I portion of the project. This will also allow us to develop (at our risk) the Right of Way mapping components fully and also begin the drainage design development in advance of Phase II initiation.

The advanced work completed to date along with the initiatives proposed by the K&S Team will ensure that the design schedule is met or reduced and that the project is constructed on schedule or earlier. **(See Schedule on Pages 27-28).**

9. ***Did the Proposer attend the pre-proposal meeting? (Maximum of 5 Points)***

YES

10. ***Does your firm accept payment by P-card? (Maximum of 3 Points)***

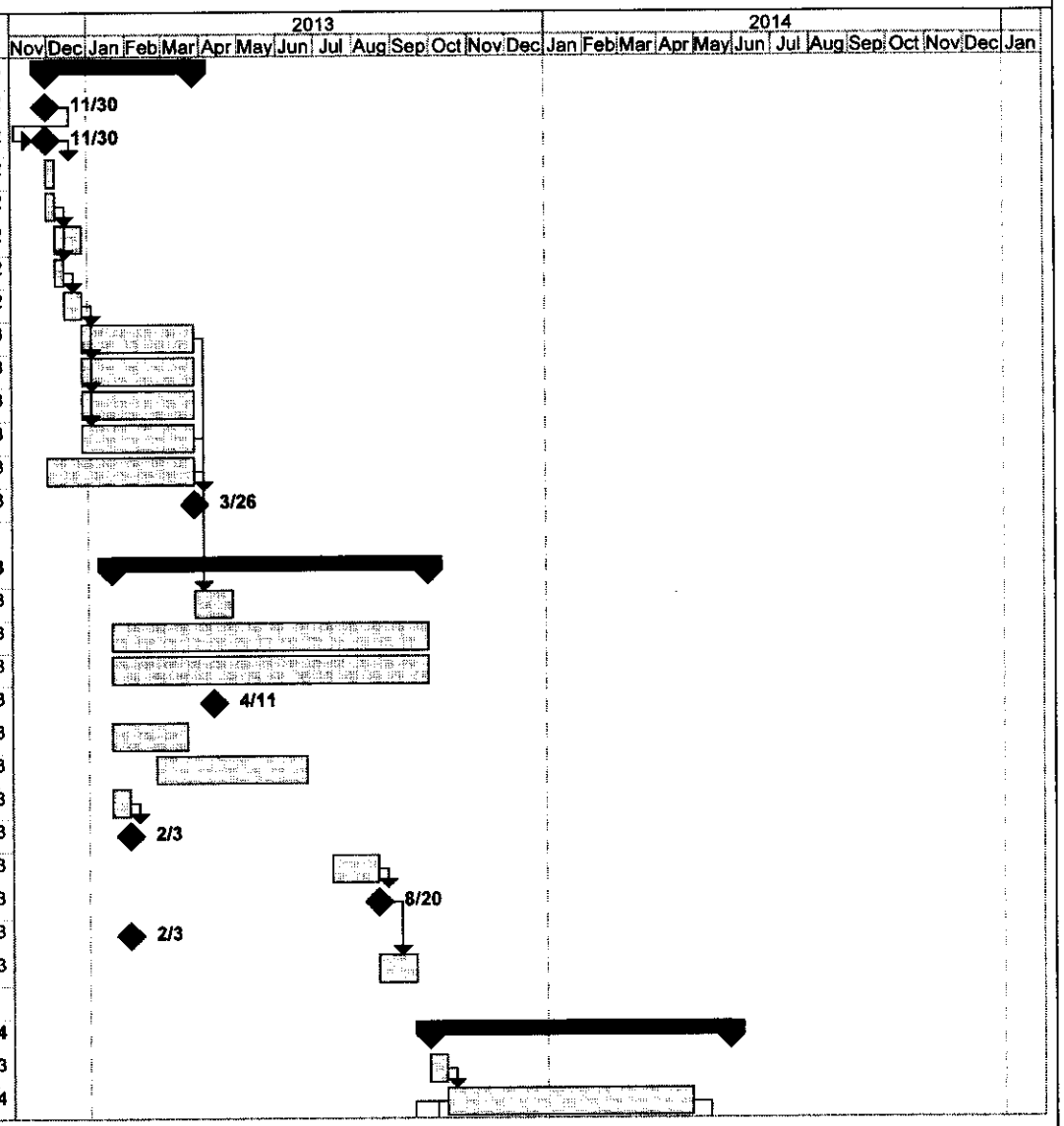
YES

11. ***Is your firm Certified as a Minority Business? (Maximum of 2 Points)***

NO

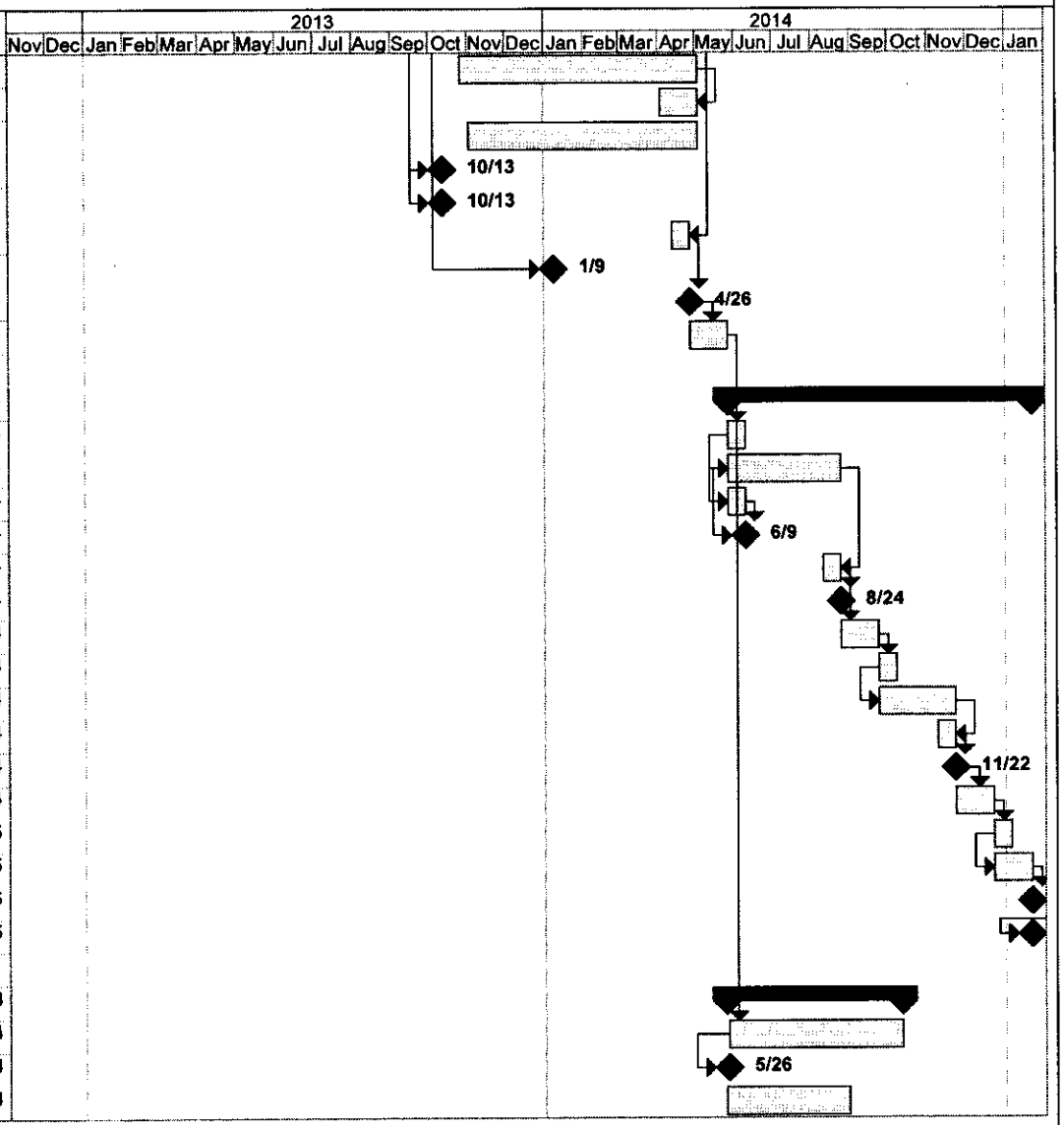
Project Schedule
Crosstown Parkway Extension
From Manth Lane to US 1
FPID: 410844-1-A8-01

ID	Task Name	Start	Finish
1	**Phase I - Survey / Mapping / Geotech**	**Fri 11/30/12**	**Tue 3/26/13**
2	Notice To Proceed	Fri 11/30/12	Fri 11/30/12
3	Project Kick-Off Meeting - Scope / Deadlines / Bu	Fri 11/30/12	Fri 11/30/12
4	Prepare / Submit QC Plan & Schedule	Fri 11/30/12	Fri 12/7/12
5	Multi-Discipline Field Visits	Fri 11/30/12	Fri 12/7/12
6	Design Field Visits (Photos, Inventoris, etc.)	Fri 12/7/12	Fri 12/28/12
7	Establish Baseline	Fri 12/7/12	Fri 12/14/12
8	Set Control	Fri 12/14/12	Fri 12/28/12
9	Design Survey	Fri 12/28/12	Tue 3/26/13
10	Right-of-Way Survey	Fri 12/28/12	Tue 3/26/13
11	Hydrologic Survey	Fri 12/28/12	Tue 3/26/13
12	Right-of-Way Mapping	Fri 12/28/12	Tue 3/26/13
13	Geotechnical Investigation and Testing	Fri 11/30/12	Tue 3/26/13
14	Receive Geotech Report	Tue 3/26/13	Tue 3/26/13
15			
16	**Phase II - 30% Plans**	**Sun 1/20/13**	**Sun 9/29/13**
17	Right-of-Way Mapping	Tue 3/26/13	Thu 4/25/13
18	Roadway Design	Sun 1/20/13	Sun 9/29/13
19	Drainage Design	Sun 1/20/13	Sun 9/29/13
20	Drainage Design Meeting	Thu 4/11/13	Thu 4/11/13
21	Bridge Development Report	Sun 1/20/13	Thu 3/21/13
22	Bridge Design	Sun 2/24/13	Mon 6/24/13
23	Community Awareness Plan Development	Sun 1/20/13	Sun 2/3/13
24	Submit Community Awareness Plan	Sun 2/3/13	Sun 2/3/13
25	Quality Control & Constructability Reviews	Sun 7/14/13	Tue 8/20/13
26	Submit Phase II (30%) Plans	Tue 8/20/13	Tue 8/20/13
27	Initial Utility Contact	Sun 2/3/13	Sun 2/3/13
28	Client Review Period	Tue 8/20/13	Thu 9/19/13
29			
30	**Phase III - 59% Plans**	**Sun 9/29/13**	**Mon 5/26/14**
31	Respond to Phase II (30%) Comments	Sun 9/29/13	Sun 10/13/13
32	Roadway Design	Sun 10/13/13	Sat 4/26/14



Project Schedule
Crosstown Parkway Extension
From Manth Lane to US 1
FPID: 410844-1-A8-01

ID	Task Name	Start	Finish
33	Drainage Design	Sun 10/27/13	Sun 5/4/14
34	Permit Application Preparation	Fri 4/4/14	Sun 5/4/14
35	Bridge Design	Sun 11/3/13	Sun 5/4/14
36	Utility Coordination / Utility Pre-Design Meeting	Sun 10/13/13	Sun 10/13/13
37	Public Meeting #1	Sun 10/13/13	Sun 10/13/13
38	Quality Control & Constructability Reviews	Sat 4/12/14	Sat 4/26/14
39	Submit Plans for TCP Approval	Thu 1/9/14	Thu 1/9/14
40	Submit Phase III (59%) Plans	Sat 4/26/14	Sat 4/26/14
41	Client Review Period	Sat 4/26/14	Mon 5/26/14
42			
43	**Phase IV Option 1- Final Design Development**	**Mon 5/26/14**	**Wed 1/21/15**
44	Respond to Phase III (59%) Comments	Mon 5/26/14	Mon 6/9/14
45	90% Plans & Specs Development	Mon 5/26/14	Sun 8/24/14
46	Utility Coordination / Certification	Mon 5/26/14	Mon 6/9/14
47	Public Meeting #2	Mon 6/9/14	Mon 6/9/14
48	Quality Control and Constructability Reviews	Sun 8/10/14	Sun 8/24/14
49	Submit 90% Plans & Specs	Sun 8/24/14	Sun 8/24/14
50	Client Review Period	Sun 8/24/14	Tue 9/23/14
51	Respond to 90% Plans and Specs Comments	Tue 9/23/14	Tue 10/7/14
52	100% Plans & Specs Development	Tue 9/23/14	Sat 11/22/14
53	Quality control and Constructability Reviews	Sat 11/8/14	Sat 11/22/14
54	Submit 100% Plans & Specs	Sat 11/22/14	Sat 11/22/14
55	Client Review Period	Sat 11/22/14	Mon 12/22/14
56	Respond to 100% Plans and Specs Comments	Mon 12/22/14	Mon 1/5/15
57	Final Plans Development	Mon 12/22/14	Wed 1/21/15
58	Submit Final Plans	Wed 1/21/15	Wed 1/21/15
59	Submit PEDDS Pacakge	Wed 1/21/15	Wed 1/21/15
60			
61	**Phase IV Option 2 - Design Build Project**	**Sun 5/25/14**	**Sat 10/11/14**
62	Prepare RFP / Criteria Package	Mon 5/26/14	Sat 10/11/14
63	Submit Permits	Mon 5/26/14	Mon 5/26/14
64	Concept Plans Development	Sun 5/25/14	Sun 8/31/14



ADDENDUM ACKNOWLEDGMENT - Proposer acknowledges that the following addenda have been received and are included in his/her proposal:

Addendum Number	Date Issued
#1	September 5, 2012

CERTIFICATION:

This E-Bid is submitted by: Name (print) Michael L. Davis who is an officer of the above firm duly authorized to sign proposals and enter into contracts. I certify that this E-Bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of this E-Bid.:

Michael L Davis
Signature

Vice President/Principal
Title

If a corporation renders this E-Bid, the corporate seal attested by the secretary shall be affixed below. Any agent signing this E-Bid shall attach to this form evidence of legal authority.

Witnesses:

Diana Byrd

If Partnership:

Print Name of Firm

By: _____
(General Partner)

If Corporation:

Keith and Schnars
Print Name of Corporation

By: T. H. Kahyee
(President)

Attest: _____
(Secretary)

KEITH AND SCHNARS, P.A. INCORPORATED CORPORATE SEAL 1972 FLORIDA

If Individual:

Signature

Print Name

ARCHITECT – ENGINEER QUALIFICATIONS

PART I - CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION *(City and State)*

Professional Engineering Design Services for Crosstown Parkway Extension Manth to US1 Port St. Lucie, FL

2. PUBLIC NOTICE DATE	3. SOLICITATION OR PROJECT NUMBER
N/A	N/A

B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Michael L. Davis, Vice President

5. NAME OF FIRM

KEITH and SCHNARS, P.A.
FLORIDA'S Big LOCAL FIRM

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
(954) 776-1616	**(954) 771-7690**	mdavis@keithandschnars.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

	(Check) PRIME	(Check) JV PARTNER	(Check) SUBCONTRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.	√			**Keith and Schnars** ☐ CHECK IF BRANCH OFFICE	**6500 North Andrews Avenue** **Fort Lauderdale, FL 33309**	**Prime**
b.			√	**Reynolds, Smith and Hills, Inc.** ☐ CHECK IF BRANCH OFFICE	**3125 West Commercial Boulevard** **Suite 130** **Fort Lauderdale, FL 33309**	**Drainage/Hydraulics/Structual**
c.			√	**GFA International, Inc.** ☐ CHECK IF BRANCH OFFICE	**521 NW Enterprise Drive** **St. Lucie, FL 34986**	**Geotechnical Engineering**
d.			√	**I.F. Rook and Associates** ☐ CHECK IF BRANCH OFFICE	**106 NW Drane Street** **Plant City, FL 33563**	**Aerial Photography**
e.			√	**Construction Engineering Consultants** ☐ CHECK IF BRANCH OFFICE	**3100 North 29th Court** **Hollywood, FL 33020**	**Constructability**
f.			√	**Electrical Design Associates** ☐ CHECK IF BRANCH OFFICE	**5300 West Atlantic Avenue** **Suite 408** **Delray Beach, FL 33484**	**Lighting**
g.			√	**Archeological Consultants, Inc.** ☐ CHECK IF BRANCH OFFICE	**8110 Blaikie Court, Suite A** **Sarasota, FL 34240**	**Archeology**
h.			√	**Bernard Kinney Associates** ☐ CHECK IF BRANCH OFFICE	**9767 Erica Court** **Boca Raton, FL 33496**	**Noise Impacts**
i.			√	**F.R. Aleman and Associates, Inc.** ☐ CHECK IF BRANCH OFFICE	**10305 NW 41st Street** **Suite 200** **Miami, FL 33178**	**Subsurface Utility Engineering**
j.			√	**CivilSurv** ☐ CHECK IF BRANCH OFFICE	**2525 Drane Field Road** **Suite 7** **Lakeland, FL 33811**	**Hydrographic Survey**
k.			√	**Geologistics, Inc.** ☐ CHECK IF BRANCH OFFICE	**9045 La Fontana Boulevard** **Suite 233** **Boca Raton, FL 33434**	**Geotechnical Support**

D. ORGANIZATIONAL CHART OF PROPOSED TEAM ☐ *(Attached)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Michael L. Davis	Principal-in-Charge	32 years	10 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

Post Masters Work, University of Tennessee, Knoxville, TN
M.S., Biology, Austin Peay State University, Clarksville, TN, 1981
B.S., Biology and Environmental Science, Minor in Chemistry, Austin Peay State University, Clarksville, TN, 1977

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

N/A

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Civic Involvement: Treasure Coast Regional Planning Council Board Member(Gubernatorial Appointee)
Member FICE Water Resources Committee Chairman, USACE Subcommittee
Member, Board of Directors& Chairman, Stewardship Committee, Pine Jog Environmental Education Center
Former Member, Board of Directors& Chairman, Real Estate Committee, Florida Atlantic University Foundation
Former Chair, LLS Light the Night Executive Committee

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
South Miami-Dade Watershed Miami-Dade County, FL	2007	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Senior Project Manager for this comprehensive study that projects, examines, and analyzes surface population growth and groundwater uses. Infrastructure and corresponding land uses, including water uses for sustaining and restoring the environment, sustaining economically viable agriculture, providing flood protection, and supplying and protecting drinking water.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Winston Park Mitigation and Restoration Coconut Creek, FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑**Check if project performed with current firm**

Principal-in-Charge of the development of a mitigation/restoration plan for this 6-acre site owned by the City of Coconut Creek. Compliance monitoring is underway.

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
CERP Acme Basin B & Broward County Secondary Canal Palm Beach & Broward Counties, FL	2006	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Senior manager for this environmental and engineering support services project for the South Florida Water Management District for 2 of the 68 projects identified in the Comprehensive Everglades Restoration Plan (CERP). Keith and Schnars is responsible for the development of Project Management Plans, Project Implementation Reports integrated with Environmental Impact Statements, and 30% Engineering Design for the Acme Basin B Discharge and the Broward County Secondary Canal System.

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Crosstown Parkway Extension Project Development and Environmental Impact Statement Port St. Lucie, FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars was commissioned to perform the Environmental Impact Statement (EIS) for this challenging project, which includes a 4000+ foot long bridge traversing environmentally-sensitive wetlands and is the only one of its kind currently underway in the U.S. The Keith and Schnars structural team provided EIS support by evaluating crossing alternatives (bridges and tunnels), bridge span lengths, and various bridge construction methods for a 6-lane facility with 10' shoulders, 6' sidewalks, and a 22' vertical clearance over the main channel.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Mark Moshier, P.E.	QA/QC Design	35 years	20 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S., Civil & Environmental Engineering, 1977

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Engineer, FL #32016

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

N/A

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED: PROFESSIONAL SERVICES	(2) YEAR COMPLETED: CONSTRUCTION (If applicable)
Vice President of Transportation Services, Keith and Schnars (Work Groups 10.1, 10.3, 10.4 and 11.0)	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Responsible for the direction of all construction engineering and inspection projects highways and structures design undertaken by Keith and Schnars. Responsibilities include including roadways, bridges, parks, aviation services and other related facilities. Contract Administration and Mangement for FDOT District 6 General Engineering Consultant contract.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED: PROFESSIONAL SERVICES	(2) YEAR COMPLETED: CONSTRUCTION (If applicable)
I-295 Resurfacing/Rehabilitation	2005	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Provided engineering oversight and QA/QC for CEI services for $32.8 million grouping of construction contracts on western section of SR-9A (I-295). The contract included bridge rail, guardrail and approach slab replacements on 12 bridges and the milling and resurfacing of 28 lane miles of I-295.

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED: PROFESSIONAL SERVICES	(2) YEAR COMPLETED: CONSTRUCTION (If applicable)
Broward Boulevard Bridge Replacements Broward County, FL	2004	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Engineer in charge of the construction of two bridge replacements along Broward Boulevard at West Tropical Way and El Dorado Parkway. New structures consisted of 11-foot diameter specially fabricated corrugated metal culverts finished with brick end walls and other decorative elements.

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED: PROFESSIONAL SERVICES	(2) YEAR COMPLETED: CONSTRUCTION (If applicable)
Jensen Beach Causeway Martin County, FL	2005	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Engineering management and QC/QA for the construction of the new Frank A. Wacha Bridge (2,523 feet in overall length), and approaches from Indian River Drive and A1A in Jensen Beach.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
C. Bryan Wilson, P.E.	Project Manager	26 years	12 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S. Civil Engineering, Auburn University, 1986	Registered Professional Engineer, FL #43447

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

N/A

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION
Crosstown Parkway and Becker Road I-95 Interchanges St. Lucie County, FL	2005	2009

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☑ **Check if project performed with current firm**

Senior Designer directing project design staff involved in development and preparation of roadway construction documents including roadway plans, storm drainage, traffic control plans, signing and pavement marking plans, signal plans, and specifications. Also assisted the Project Manager with the development the Preliminary Engineering Report, drainage reports, permitting and day-to-day coordination between the FDOT, City of Port St. Lucie and multiple Developers. The project scope involved construction of a new tight diamond interchange connecting Crosstown Parkway (Previously called West Virginia Drive) and Becker Road to I-95.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION
I-95 RRR – Martin County Line to SR-70/Okeechobee Road St. Lucie County, FL	2008	2011

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Project Manager for the Resurfacing, Restoration and Rehabilitation (RRR) project on SR-9 (I-95) from the Martin/St. Lucie County Line to SR-70/Okeechobee Road including interchange ramps within the limited access right-of-way.

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION
Andrews Avenue– Segment 2&3 Bridge over the CSX Corridor Pompano Beach, Broward County, FL	2005	2008

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars designed and permitted the construction of a 1.5 mile new 4-lane divided roadway from Atlantic Boulevard to NW 10th Street. This portion of the project included the design of a grade separated bridge crossing of Andrews Avenue over the CSX rail corridor and Martin Luther King Jr. Boulevard. Also included were the design and permitting of a new closed storm drainage system and retention pond system, four signalized intersections, signing and marking plans, landscape plans, and a new roadway lighting system.

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION
I-95 Managed Lanes Miami-Dade County, FL	2009	2009

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Project Manager for Development of conceptual roadway plans, striping plans, signing plans and construction specifications for the I-95 Managed Lanes Project for Florida Department of Transportation - District 6. Mr. Wilson also developed the request for proposal packages and directed post design services and construction support efforts during construction. Scope of work included design of variable priced tolling lanes within the existing I-95 corridor from NW 29th Street to Golden Glades interchange in Miami-Dade County, Florida.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Mark Kline, P.E.	Roadway Design	29 years	24 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S., Civil Engineering, Ohio University, Athens, OH, 1983

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Engineer, FL #44016

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Timing Traffic Signals with TEAPAC, PASSER, TRANSY and NETSIM/ CORSIM, February 1998

19. RELEVANT PROJECTS

a

(1) **TITLE AND LOCATION** *(City and State)*

I-95 RRR – Martin County Line to SR-70/Okeechobee Road
St. Lucie County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2008	2011

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Design engineer for Resurfacing, Restoration and Rehabilitation (RRR) project directed at a 15.4 Miles section of I-95 in St. Lucie County. The project scope involves pavement resurfacing and rehabilitation, signing and marking, guardrail improvements, shoulder repair, 6-traffic monitoring sites, permitting and utility coordination.

b

(1) **TITLE AND LOCATION** *(City and State)*

Districtwide General In-House Consultant
FDOT District 4, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Responsible for constructability and bidability phase plan reviews related to various transportation facility improvement projects. The scope of work includes the review of all contract plan components (Roadway, Signing and Pavement Markings, Signalization, Lighting and Landscape) as well as the review of all pertinent contract documents (typical sections approvals, RRR reports, safety reports, drainage reports, pavement design reports, environmental reports, computation books, permit documentation, utility coordination, etc.). Additionally provide design services for support of FDOT in-house design projects.

c

(1) **TITLE AND LOCATION** *(City and State)*

Powerline Road Widening PD&E and Final Design
Broward County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2004	2004

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Completed engineering design plans for the milling, resurfacing, and widening of Powerline Road from Sample Road to the north of SW 10 Street (Sawgrass Expressway) in Broward County, Florida. This project involved the preparation of roadway plans, drainage analysis and permitting, signing and marking plans, signalization plans, lighting plans and landscape plans.

d

(1) **TITLE AND LOCATION** *(City and State)*

I-95 Managed Lanes
Miami-Dade County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2009	2009

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Design Engineer providing design of conceptual roadway plans, striping plans, signing plans and construction specifications for the I-95 Managed Lanes Project for FDOT District 6. Scope of work included design of variable priced tolling lanes within the existing I-95 corridor from NW 29th Street to Golden Glades interchange in Miami-Dade County, Florida.

e

(1) **TITLE AND LOCATION** *(City and State)*

Andrews Avenue Extension – Segment 2 and 3 Bridge over the CSX Corridor
Broward County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2008	2008

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Design Engineer for the production of roadway plans including coordination of roadway sub consultants. Keith and Schnars designed the bridge plans, storm drainage, striping plans, signal plans, landscaping as well as utility coordination, permitting and specifications preparation for the construction of new 1.5 mile, 4-Lane divided facility between Atlantic Boulevard and NW 10th Street in Pompano Beach, Florida.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Matt Neddeff, P.E.	Pavement and Marking/Utility Coordinator	7 years	6 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S., Civil Engineering, University of Florida, 2005

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Engineer, FL #71611

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Florida Academic Scholar
Member of American Society of Civil Engineers (ASCE)

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Andrews Avenue Extension (Segment 5) Broward County, FL	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Assisted Project Manager tasked with the development of complete construction plans and specifications. Andrews Avenue is being reconstructed as a divided 4-lane urban typical section, and requires significant right of way acquisition. The project is being constructed between SW 3rd Street and Atlantic Boulevard. The project includes upgrading the signalized intersection at SW 3rd Street, ADA ramp improvements, sidewalk construction, drainage improvements, signing and pavement marking, utility coordination, permitting and landscaping.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Crosstown Parkway Extension Project Development and Environmental Impact Statement Port St. Lucie, FL	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Assisted the Project Manager with the development of conceptual roadway plans for the Project Development and Environment (PD&E) study for the extension of Crosstown Parkway across the North Fork of the St. Lucie River to US-1. This study has been designated as an Environmental Impact Statement (EIS).

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Districtwide Utility Coordination Contract Broward County, FL	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Utility Coordinator responsible for assisting the Senior Utility Coordinator with the management of the contract. Responsibilities include the identification of existing and proposed utility facilities, determination of eligibility of compensable interests, resolution of conflicts between utility facilities and proposed construction. Also responsible for securing executed legal agreements (Utility Work Change Orders, JPAs, MOAs etc).

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
I-95 RRR – Martin County Line to SR-700/Okeechobee Road St. Lucie County, FL	2008	2011

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Responsible for specification package, Long Range Estimate, TRNS*PORT inputs, and computing the quantities for the project. Created sign improvement package that included images and signs identified in plans that need improvement, review and implement comments from DOT, and created change memo for final responses to comments.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Coriann Salas, P.E.	Structural Design	11 years	11 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S., Civil Engineering, University of Central Florida, 2001

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Engineer, FL #64779

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

N/A

19. RELEVANT PROJECTS

a

(1) **TITLE AND LOCATION** *(City and State)*
Crosstown Parkway Extension Project Development and Environmental Impact Statement
Port St. Lucie, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	2010

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars was commissioned to perform the Environmental Impact Statement (EIS) for this challenging project, which includes a 4000+ foot long bridge traversing environmentally-sensitive wetlands and is the only one of its kind currently underway in the U.S. The Keith and Schnars structural team provided EIS support by evaluating crossing alternatives (bridges and tunnels), bridge span lengths, and various bridge construction methods for a 6-lane facility with 10' shoulders, 6' sidewalks, and a 22' vertical clearance over the main channel.

b

(1) **TITLE AND LOCATION** *(City and State)*
I-595 Express Corridor Roadway Improvement Project, Bridge Design, Davie, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	Ongoing

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Engineer of record for the load rating of a 328'-2" long, 30'-1" wide bridge using 72" Florida I-Beams. The middle span of the bridge was a 160'-0" span lenth, the longest FIB used on the I-595 Express Project.

c

(1) **TITLE AND LOCATION** *(City and State)*
I-95 Managed Lanes
Miami-Dade County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2007	2010

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Engineer of Record for the structural toll gantry plans and structural project manager for development of bridge widening plans for the I-95 Managed Lanes Project for FDOT District 6. Assisted in the development of the RFP Design Build package and post design services and construction support efforts during construction. Scope of work included design of variable priced tolling lanes within the existing I-95 corridor from NW 29th Street to Golden Glades interchange in Miami-Dade County, Florida

d

(1) **TITLE AND LOCATION** *(City and State)*
Crosstown Parkway and I-95 Interchange
St. Lucie County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2004	2009

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Assisted with the Interchange Justification Report, Project Development and Environment Studies, Bridge Development Reports and Final Design for this tight diamond interchange project. Design Engineer responsible for the new two-span skewed 264-ft long AASHTO beam bridge on Crosstown Parkway spanning over I-95.

e

(1) **TITLE AND LOCATION** *(City and State)*
I-95 Pedestrian Overpas
Miami-Dade County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2004	2004

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Design Engineer for the replacement of an existing pedestrian truss. The feasibility of rehabilitating the existing structure to meet the current code requirements was studied, including the effects harmonic motion. The final design resulted in the replacement of the 214-foot long truss over a congested 12-lane interstate highway. The new truss is a 230-foot long signature hollow structural steel (HSS) truss near the northern entrance to Miami-Dade County. The design method used was LFD.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Jonni Joannou, P.E.	Structural Design	50 years	15 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Ft. Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B. Sc. (Mechanical Engineering), University of Witwatersand, Johannesburg, South Africa, 1958

B. Sc. (Civil Engineering), University of Witwatersand, Johannesburg, South Africa, 1961

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Engineer, FL #42176

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Recipient of FDOT's Bill Dean Award for Bridge Design, 2001 and 2005

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Frank A. Wacha Bridge over the Intracoastal Waterway in Jensen Beach Martin County, FL	2002	2005

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Mr. Joannou headed up a team of three Engineers that was responsible for the design of the substructure, and he completed the CADD drawings for the pier drawings. This structure is a 17-span 78-inch Florida Bulb-Tee beam bridge, with a cast-in-place deck continuous over 4 spans. The bridge has sixteen 148-foot spans and a main channel span of 161 feet. The piers are founded on 30-inch and 24-inch prestressed concrete piles, and the in-water piers were designed to resist a ship impact load. The design was completed in accordance with AASHTO LFD. The piers and piles were designed using the Florida Pier program.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Evans Crary Sr. Bridge Martin County, FL	2001	2001

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Mr. Joannou was the Engineer of Record during the preliminary design phase and prepared the Bridge Development Report. At the time of the project, Mr. Joannou was one of the first users of the FDOT's Florida Pier program and played a key role in helping the FDOT trouble-shoot the software's early releases with respect to ship impact design. The bridge was awarded one of the 2001 Top Ten Bridges by Road and Bridge magazine.

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
I-595 Slip Ramp Broward County, FL	2005	2008

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☐ **Check if project performed with current firm**

Mr. Joannou was the Engineer if Record for this 9-span continuous cast-in-place reinforced concrete slab bridge traversing a deep drainage lake adjacent to I-595. The spans are 42 foot long and are supported on pile bents. The piles have unsupported lengths of up to 40 feet. The structure was designed in accordance with AASHTO LRFD.

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Sunrise Boulevard over SR-7 Broward County, FL	2007	2008

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☐ **Check if project performed with current firm**

Mr. Joannou was the Designer of Record for this project. This is a three-span continuous steel girder bridge with spans of 125', 259' and 125'.The unusual feature of this structure is that, due to vertical clearance restraints, the pier caps had to be made integral with the superstructure. Post-tensioned concrete pier caps were provided at each pier and a detailed construction sequence was specified in order to reduce the effects of differential movement between the steel girders and the newly-poured concrete. The design was done in accordance with AASHTO LFD.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Barbara King-Russell, P.E.	Structural Design	25 years	21 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S. Civil Engineering, Rensselaer Polytechnic Institute, Troy, NY, 1981

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Engineer, FL #41956

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

N/A

19. RELEVANT PROJECTS

a

(1) **TITLE AND LOCATION** *(City and State)*

I-95 Managed Lanes
Miami-Dade County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2009	2009

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑**Check if project performed with current firm**

Design Engineer responsible for widening of I-95 over SR-112/I-195. Ms. Russell prepared 30% bridge plans and design calculations, in addition to coordinating with flyover abandoned and reused piers. She evaluated geometry of the SR-112/I-195 flyover bridges relative to the I-95 bridges and prepared MSE wall control drawings. (AASHTO LRFD design)

b

(1) **TITLE AND LOCATION** *(City and State)*

I-595 Express Corridor Improvement Project – Bridge Design
Davie, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	Ongoing

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

QC Engineer for I-595 Ramp E-2 Over Hiatus Road. The project was a redesign of existing 328'-2" long, 30'-1" wide, three span steel bridge plans to accommodate concrete 72" Florida I-Beams in order to save the Contractor money in a value engineer excersice.

c

(1) **TITLE AND LOCATION** *(City and State)*

Andrews Avenue Segments 2 and 3, Bridge over CSX Corridor Boulevard
Broward County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2008	2008

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑**Check if project performed with current firm**

Design Engineer for design of a new 604-foot long, 3-span continuous, steel plate girder bridge, located over an at-grade railroad crossing, with a reverse curvature alignment and highly skewed straddle piers. Ms. Russell prepared control plans for MSE walls, in addition to design calculations and control plans for temporary sheet pile retaining walls required for construction of pier footings and nearby box culvert replacement.

d

(1) **TITLE AND LOCATION** *(City and State)*

Evans Crary Sr. Bridge
Martin County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2001	2001

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑**Check if project performed with current firm**

This structure is a high-profile, 17-span post-tensioned segmental bridge with spans of 180-ft, overall length of 3904.2-ft and vertical clearance of 65-ft, on pile-supported piers over St. Lucie River. Ms. Russell prepared substructure design loads, including ship impact loading. Ms. Russell checked substructure design using Florida Pier computer program. Prepared control plans for permanent MSE walls. Prepared design calculations and control plans for temporary sheet pile retaining walls required for multi-phased staged construction.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Robert K. Krisak, P.L.S.	**Survey and Mapping**	33 years	32 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
A.A.S., Forestry, Paul Smith's College, 1977	Registered Professional Surveyor & Mapper, FL #4641

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Florida Society of Professional Surveyors and Mappers; International Who's Who of Professionals

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Fort Lauderdale Miscellaneous Survey Contract Fort Lauderdale, FL	2008	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Mr. Krisak serves as Project Manager, supervising Engineering Design Surveys, Boundary Surveys for Key Projects such as Sistrunk Boulevard, NW 19th Street, Miami Road, Sunset Memorial Gardens, Septic Area #2, #3, #4, #5, #8 and #16, Facility Security Sites, Fort Lauderdale Country Club, Shady Banks, Starlight Landing, Fire Station #13, Sunrise Key and Sunrise Intracoastal Subdivision, NE 56th Street, South Andrews Avenue of the City's Water Works 2011 Program.

b

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
I-95 Managed Lanes Miami-Dade County, FL	2009	2009

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars was the Program Manager for the development of the I-95 Managed Lane project in Miami-Dade County.

c

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Crosstown Parkway and Becker Road I-95 Interchanges St. Lucie County, FL	2005	2009

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars was contracted to conduct a corridor study to determine the type, design, and location of improvements in the corridor between I-95 and Floresta Drive in the rapidly growing City of Port St. Lucie. For the evaluation of the corridor for environmental aspects, wetland and upland habitats were identified and mapped for every vacant parcel within the proposed right-of-way. The purpose of the field survey was to map natural habitats and to determine the presence of endangered, threatened, and species of special concern. Gopher tortoises were present on some of the vacant parcels and we assisted the City in the development of a mitigation proposal for their relocation.

d

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Powerline Road Widening PD&E and Final Design Broward County, FL	2004	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars completed engineering design plans for the widening of Powerline Road from 4 to 6-lanes. This project involved roadway plans, surveying, permitting, signing and marking plans, signalization plans, lighting plans and landscape plans.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Eric Wilhjelm, P.S.M.	Survey and Mapping	21years	13 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.L.S., Land Surveying, University of Florida, 1997

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Surveyor & Mapper, FL #5872

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Florida Society of Surveyors and Mappers

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
a	**I-10 CEI Survey** Jacksonville, FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Surveyor in Charge for CEI services for I-10 in Duval County. This project is a 7 mile construction project.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
b	**Hollywood/Pines Boulevard Survey** Broward County, FL	2008	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

A design survey from Douglas Road to Presidential Circle. Mix of Lamp and traditional survey.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
c	**I-95 RRR – Martin County Line to SR-70/Okeechobee Road** St Lucie County, FL	2008	2011

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Design survey for a 15 mile RRR project. The project entailed setting control and cross sections every 500 to 1000 feet. It also included the calculation of historic baseline and right-of-way.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
d	**Districtwide Miscellaneous Survey and Mapping Contract** Broward, Palm Beach and Martin Counties, FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Mr. Wilhjelm serves as the Project Manager for FDOT District 4 Districtwide Miscellaneous Survey and Mapping contract from May 2006 to present. Projects were located in Broward, Martin and Palm Beach County.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
e	**Districtwide Miscellaneous Survey and Mapping Contract** Miami-Dade and Monroe Counties FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Mr. Wilhjelm served as the Project Manager for District 6 Districtwide Miscellaneous Survey and Mapping contract from August 2005 to Present. He supervised and oversees various surveying task as needed by the Department from simple stakeout assignments to 5-mile DTM. Projects were located in both Miami-Dade and Monroe County.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Abbott, P.G.	Environmental	14 years	8 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

M.S., Geology, New Mexico Tech, 1995
B.S, Geology, Virginia Tech, 1992

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Professional Geologist, FL #2401

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Abbott et al 2004 *The anatomy of a long-lived fault system - structural and thermochronologic evidence for Laramide to Quaternary activity on the Tijeras fault, New Mexico*; Abbott et al 1999 *Investigation of suspect liquefaction features at the Savannah River Site, South Carolina; Abbott etal* 1995, *Paleogene synorogenic sedimentation of the Galisteo basin related to the Tijeras-Canoncito fault system*

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*

Crosstown Parkway Extension Project Development and Environmental Impact Statement
St. Lucie County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars is leading a Project Development and Environment Study (PD&E) and Environmental Impact Statement (EIS) to evaluate a new river crossing over the North Fork of the St. Lucie River that will link U.S. Highway 1 and Crosstown Parkway, a major east-west transportation corridor within Port St Lucie. Mr. Abbott prepared the Contamination Screening Evaluation Report and provided oversight of the field assessment of the river and upland communities (approximately 850 acres), including habitat mapping of the project area, surveys for threatened and endangered species, wetland delineations at an aerial photograph level, and an Essential Fish Habitat Assessment.

b

(1) TITLE AND LOCATION *(City and State)*

Environmentally Sensitive Lands Code Compliance
Palm Beach Gardens, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars assist City staff in the implementation of the Natural Resources and Environmentally Significant Lands Code. We conduct sufficiency reviews of Environmental Assessments submitted for proposed development projects that may impact Environmentally Significant Lands. We also developed an EAR checklist to ascertain whether each submitted Environmental Assessment fulfills the requirement of Land Development Code.

c

(1) TITLE AND LOCATION *(City and State)*

Environmental Site Assessments
Broward County, Miami-Dade County, Palm Beach County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2012	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

As Director of Environmental Sciences and Water Resources Planning, Mr. Abbott provides management and technical support for environmental site assessments, ecological assessments, threatened and endangered species surveys, contamination assessments and environmental impact analyses.

d

(1) TITLE AND LOCATION *(City and State)*

MDX Technical Review of PD&E Documents
Miami-Dade County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2012	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Mr. Abbott provides technical reviews of environmental documents prepared by various consultants prior to submittal to MDX. For SR 874 Ramp Connector, documents have included the State Environmental Impact Report, Contamination Screening Evaluation Report, Endangered Species Biological Assessment, Wetlands Evaluation Report, Noise and Air Quality Reports, and Cultural Resources Assessment Survey. For SR 924 Extension West, documents have included Contamination Screening Evaluation Report, Endangered Species Biological Assessment, Wetlands Evaluation Report, Air Quality Technical Memorandum, and Cultural Resources Assessment Survey. For the SR 836 Express Bus project, Mr. Abbott performed the contamination assessment for a Categorical Exclusion.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Joyce Howland	Permitting	37 years	10 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

N/A

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

N/A

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Qualified Stormwater Management Inspector & Instructor – NPDES ; Palm Beach County Stormwater Management Inspector – NPDES 1984 District Engineer's Managerial Award ; 1988 FPL Outstanding Quality Performance Award

19. RELEVANT PROJECTS

a

(1) TITLE AND LOCATION *(City and State)*

Wiles Road Mitigation
Broward County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Permitting Lead for a 32-acre parcel located north of Tradewinds Park as well as permitting of a 10-acre area incorporated within a 42-acre mitigation project (Everglades Restoration Area - ERA) designed concurrently by Keith and Schnars for four Broward County projects.

b

(1) TITLE AND LOCATION *(City and State)*

Coral Creek Bridge Replacement
Charlotte County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2011	2011

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Coordinated with NMFS and SHPO and processed permits with SWFWMD, USACE, and USCG for the realignment of the Coral Creek Bridge. The environmentally sensitive project area included mangroves, seagrasses, a public park, historical structures and an Indian mound.

c

(1) TITLE AND LOCATION *(City and State)*

Crosstown Parkway and Becker Road **I-95 Interchanges**
St. Lucie County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
2005	2009

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Environmental permitting lead for the acquisition of construction permits associated with the new interchanges at Crosstown Parkway and Becker Road. Permits were received from FDOT, FWC, USACE and SFWMD for bridge construction, dewatering, stormwater management, and wetland and species impacts.

d

(1) TITLE AND LOCATION *(City and State)*

Crosstown Parkway Extension Project Development and Environmental Impact Statement
St. Lucie County, FL

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	**CONSTRUCTION** (If applicable)
Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Ms. Howland provides team and document production coordination for this proposed bridge crossing of the North Fork of the St. Lucie River. Ms. Howland also coordinates the water quality analyses.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Bruce Reed, R.L.A.	**Landscape Architecture**	20 years	15 years

15. FIRM NAME AND LOCATION *(City and State)*

KEITH AND SCHNARS – Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S., Landscape Architecture, University of Florida, 1987
A.A., Florida State University, 1984

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Registered Landscape Architect, FL #0001479

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Crime Prevention through Environmental Design (CPTED) December 1998
American Society of Landscape Architects

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
a	**Coconut Creek Casino** Coconut Creek, FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

The Coconut Creek Casino is a complex project located on 49 acres of Tribal Land at the intersection of SR-7 and Sample Road in the City of Coconut Creek. Due to split jurisdictional responsibilities, the project has involved complex land-use and zoning issues. Keith and Schnars has developed a whole range of plans on behalf of the Tribe, from easement and right of way abandonments, to DRI and Master plan processing. As the project's lead consultant, we have been involved in the preparation and analysis of all land use, zoning, civil engineering, traffic engineering, and survey services for the project.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
b	**Districtwide Landscape Architectural Services** FDOT District 6, FL	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Consulting services including construction plans for landscape, hardscape, and irrigation improvements; tree relocation, plan reviews, reports, construction inspection and/or field assessments, renderings, permitting, coordinating and updating of project logs, project coordination, correspondence, project scopes, roadway and traffic control plans.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
c	**Coconut Creek Main Street Master** Coconut Creek, FL	2004	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

Keith and Schnars was part of the team that worked with the City of Coconut Creek to prepare a Main Street Design Manual for the creation of a pedestrian oriented green community in one of the last large tracts of undeveloped infill parcels in northern Broward County. The Landscape Architecture Department designed the streetscapes guidelines, assisted in the preparation of a traffic analysis and land use plan amendment for the City.

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
d	**Brighton Reservation Fitness Trail** Seminole Tribe of Florida	Ongoing	N/A

(3) **BRIEF DESCRIPTION** *(Brief scope, size, cost, etc.)* **AND SPECIFIC ROLE** ☐☑ **Check if project performed with current firm**

The Keith and Schnars Landscape Architecture Division provided services from a Site Master Plan through construction documents, including program elements of pedestrian trails, outdoor exercise equipment, lighting, signage, park furniture, pavilions, and wetland plantings for the Seminole Tribe of Florida.

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 1
21. TITLE AND LOCATION (City and State) **Evans Crary Sr. Bridge** Stuart, FL	22. YEAR COMPLETED PROFESSIONAL SERVICES 2001	CONSTRUCTION (If applicable) 2001

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District 4	John Danielsen 3400 W. Commercial Blvd. Ft. Lauderdale, FL 33309	(954) 777-4644

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

Keith and Schnars completed the design and detailing of the substructure for the 1190 meter long Evans Crary Sr. Bridge over the St. Lucie River in Martin County. The bridge was analyzed for ship impact loading with the Florida Pier program and designed using an innovative pipe pile connection to the footing caps to resist the large ship impact forces. The structural design plans included temporary sheet pile walls, permanent retaining walls, signal mastarm structures and a temporary widening of the existing bridge to accommodate maintenance of traffic. The Keith and Schnars team also provided designs for roadway approaches, signalization, signing and marking, traffic control, lighting, landscape and drainage plans as well as environmental permitting.

An environmental assessment was prepared by Keith and Schnars in compliance with Section 7(c) of the Endangered Species Act of 1973. We performed a comprehensive evaluation of threatened and endangered species to determine what threatened and endangered species are expected to occur within the project vicinity, and potential impact of the proposed project alternatives on wildlife and habitat. An Endangered Species Biological Assessment was also conducted to address these requirements, and also provide recommendations to minimize potential impacts to specific species and habitats known or expected to occur within the Evans Crary Sr. Bridge study corridor. We compiled a species list through the Florida Natural Areas Inventory (FNAI) database, which includes a compilation from Federal ("Species" database) and State (Florida Department of Natural Resources - FDNR) sources. Additional sources (Nature Conservancy, Summary of Independent Observations, etc.) were consulted in order to establish a potential set of floral and faunal species for further field investigation.

Keith and Schnars also provided a Landscape Design for an entrance gateway feature for the town of Sewalls Point. In addition to planting and irrigation design, hardscape and architectural wall treatments were provided. The project was nationally recognized as one of the top 10 bridge design by Roads and Bridges Magazine in 2001.

Team Positions: Principal-in-Charge – Tanzer Kalayci, P.E.; Structural– Jonni Joannou, P.E.; Barbara King-Russell, P.E., Roadway – C. Bryan Wilson, P.E.
Engineering Fees: $2,500,000
Construction Fees: $30,800,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		22. EXAMPLE PROJECT KEY NUMBER 2
21. TITLE AND LOCATION (City and State) I-595 Express Corridor Improvements Project – Bridge Design Broward County, FL	22. YEAR COMPLETED PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If applicable) Ongoing

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Dragados USA	Jose Ballesta 595 Corporate Park of Commerce, 10368 SR-84 Suite 103, Davie, FL 33324	(954) 668-2015 Ext. 725

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

I-595 is Broward County's major east-west thoroughfare used by residents and visitors to get to work, shops, entertainment venues, the airport, Port Everglades and the beaches. The Florida Department of Transportation signed a public-private partnership (P3) agreement with I-595 Express, LLC, to serve as the concessionaire to design, build, finance, operate and maintain (D/B/F/O/M) the I-595 corridor improvements project for a long-term commitment of 35 years. The improvements to the I-595 corridor will vastly improve driving conditions along I-595 and preserve the future vitality of the corridor. The project limits extend from the I-75/ Sawgrass Expressway interchange to the I-595 / I-95 interchange in Central Broward County.

The I-595 Express Corridor Improvements Project was divided into five construction segments, A through E, to expedite the work. Keith and Schnars was the structural engineer of record for two proposed ramp bridges on I-595 over Hiatus Road a part of Segment B. One of the ramp bridges was on the construction schedule critical path so the design was expedited in order to maintain the project schedule. The Ramp I bridge was three spans using 72" FIBs with a total length of 357'-8", and 43'-1" wide with an 8'-0" barrier mounted sound wall. The Ramp E-2 bridge was also three spans using 72" FIBs with a total length of 328'-2", and 30'-1" wide with utilities attached to the underside of the deck and drainage pipe imbedded in the piers. Both bridges were slightly skewed and had to be positioned to avoid conflicts with the roadway below. The middle span of both bridges was160'-2" in length, the longest FIB used on the I-595 Express Project.

Team Positions: Principal-in-Charge - Mark Moshier, P.E.; Project Manager- Coriann Salas, P.E., Structural Project Engineers: Brian Chunn, P.E., Barbara King-Russell, P.E., Nicole Axelrod, P.E., Justin Fries, E.I.
Design Fees: $50,000
Construction Fees: $445 Million (P3) (Segment B)

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)			F. EXAMPLE PROJECT KEY NUMBER 3
21. TITLE AND LOCATION *(City and State)* **Crosstown Parkway Extension Project Development and Environmental Impact Statement** Port St. Lucie, FL	22. YEAR COMPLETED PROFESSIONAL SERVICES To be Completed 2013	CONSTRUCTION *(If applicable)* N/A	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Port St. Lucie	Patricia Roebling, P.E. 121 S.W. Port St. Lucie, Blvd., Building B Port St. Lucie, Florida 34984	(772) 871-5177

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

The City of Port St. Lucie's ranking by the United States (U.S.) Census Bureau as the number one fastest growing city among U.S. cities with a population over 100,000 people warranted the investigation of a new east-west corridor providing access and egress over the North Fork of the St. Lucie River. Keith and Schnars was commissioned to perform the Environmental Impact Statement (EIS) for this challenging project, which includes a 4000+ foot long bridge traversing environmentally-sensitive wetlands and is the only one of its kind currently underway in the U.S. The Keith and Schnars structural team provided EIS support by evaluating crossing alternatives (bridges and tunnels), bridge span lengths, and various bridge construction methods for a 6-lane facility with 10' shoulders, 6' sidewalks, and a 22' vertical clearance over the main channel. In order to minimize environmental impacts, "Top Down" bridge construction methods ranging from conventional equipment to specialized machinery were studied for incorporation into the EIS. This required close coordination with contractors nationwide who are familiar with "Top Down" construction techniques in order to evaluate up-to-date industry capabilities and construction costs.

Team Positions: Principal-In-Charge - Michael L. Davis; Project Manager – John Krane, P.E.; Structural– Coriann Salas, P.E., Barbara King-Russell, P.E., Justin Fries, P.E.; Roadway – C. Bryan Wilson, P.E., Matt Neddeff, P.E., Mark Moshier, Jr., E.I., Environmental - John Abbott, P.G.; Permitting - Joyce Howland, Public Involvement – Dawn Sonneborn, AICP
Contract Fees: $4,100,000
Construction Fees: N/A

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District 4	John Olson, P.E. 3400 W. Commercial Blvd. Ft. Lauderdale, FL 33309	(954) 777-4452

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

This project is a Lump Sum Interstate RRR project of the section of SR-9/I-95 from the Martin/St. Lucie County Line (MP 0.000) to SR-70/Okeechobee Road (MP 15.379) in St. Lucie County, Florida. The primary purpose of this project is to rehabilitate and extend the life of the existing flexible pavement on the SR-9/I-95 mainline and service interchange ramps within the project limits. The project includes milling and resurfacing all travel lanes within the project limits and making necessary improvements in compliance with current 3R Interstate/Freeway safety criteria. SR-9/I-95 is a 6-lane divided Interstate Highway and is part of the National Highway System, Florida Intrastate Highway System and the State Highway System. It is also designated a Hurricane Evacuation Route. There are four service interchanges in this corridor including Gatlin Boulevard M.P 4.311 St. Lucie West Boulevard M.P. 7.73, Midway Road M.P. 12.153 and SR-70 (Okeechobee Road) M.P. 15.379. All the interchange ramps are single lane ramps. Only the ramps in the southeast and southwest quadrants of the SR-70/Okeechobee Road interchange are included in this project. This project ends just south of SR-70/Okeechobee Road. The overall project length is 15.379 miles.

Team Positions: Principle-In-Charge – Mark Moshier, P.E., Roadways – C. Bryan Wilson, P.E., Carlos Alcantara, P.E., Matt Neddeff, P.E., Mark Moshier, Jr., E.I.
Design Fees: $1,000,000
Construction Fees: $25,000,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		24. EXAMPLE PROJECT KEY NUMBER 5
21. TITLE AND LOCATION *(City and State)* **Powerline Road Widening PD&E and Final Design** Broward County, FL	22. YEAR COMPLETED PROFESSIONAL SERVICES 2004	CONSTRUCTION *(If applicable)* 2004

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District 4	Pat Glass, P.E. 3400 W. Commercial Blvd. Ft. Lauderdale, FL 33309	(954) 777-4681

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

Keith and Schnars prepared the PD&E and designed final roadway improvements for Powerline Road from north of Sample Road to south of Hillsboro Boulevard for the widening of Powerline Road from 4 to 6-lanes. This project involved roadway plans, surveying, permitting, signing and marking plans, signalization plans, lighting plans and landscape plans. Roadway design involved the widening of the roadway from 4 lanes to 6 lanes and conversion of the existing drainage system from roadside swales to storm sewers. Keith and Schnars was responsible for roadway geometric design; storm sewer design and permitting; as well as signing, marking and signalization design. Keith and Schnars provided utility coordination and relocation design in this densely developed industrial corridor. Additional services included public information services, environmental permitting and construction inspection support services.

As part of this roadway improvement project, Keith and Schnars' landscape architects provided landscape, hardscape and irrigation design. The landscape architects worked closely with the maintaining authority (City of Deerfield Beach) to develop a landscape theme and design that incorporated the desired species and level of maintenance. Keith and Schnars prepared all fieldwork and permit data for the tree mitigation permits.

Team Positions: Principal-In-Charge – Mark Moshier, P.E., Project Manager – Mark Kline, P.E., Roadways – C. Bryan Wilson, P.E., Survey – Robert K. Krisak, P.L.S., Landscape – Bruce Reed, R.L.A.
Design Fees: $1,500,000 (PD&E and Final Design)
Construction Fees: $11,000,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District 6	Jose Barrera, P.E. 1000 NW 111 Avenue Miami, FL 33172	(305) 470-5260

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

Keith and Schnars designed 1.4 miles of Biscayne Boulevard roadway improvements in the heart of old downtown Miami including drainage, sidewalk, ADA accessibility, utility and road-widening improvements. The project scope included the preparation of construction plans for Biscayne Boulevard from NE 15th Street to NE 35th Terrace. The plans detail reconstruction of Biscayne Boulevard along with a full replacement of the existing drainage system. The existing drainage system was replaced with a deep well system for a majority of the project; however the southern portion of the project required the installation of a pump station as an injection well drainage system was necessary due to the low elevations in this section of the project. The project also includes the installation of new a decorative lighting system, landscaping and irrigation. All 8 signalized intersections with span wire systems were replaced with standard FDOT mast arms and the existing overhead truss structure was replaced with a smaller cantilever sign structure.

Keith and Schnars landscape architects approached the design for the Biscayne Boulevard project to reflect the distinctive urban street character of the existing stores, businesses, and mixed-use residential. As desired by the City of Miami and the FDOT District 6, the stately and historic existing Royal Palms were preserved. They were supplemented with the addition of large Live Oaks that provide shade creating a linear plaza corridor. Sidewalk widths were increased to enhance the plaza concept. Under the trees and palms, large planted and irrigated spaces of shrubs and ground covers were designed in a "ribbon" pattern. Emphasis was on low maintenance, native and flowering plants; sod areas were eliminated. Additionally, conduit and junction boxes for future landscape lighting were designed for the project.

Team Positions: Principal-in-Charge – Mark Moshier, P.E.; Project Manager – Carlos Alcantara, P.E. Roadway – Matt Neddeff, P.E.
Design Fees: $1,500,000
Construction Fees: $15,800,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)			20. EXAMPLE PROJECT KEY NUMBER 7
21. TITLE AND LOCATION *(City and State)* **Andrews Avenue Segments 1 and 2 & 3 Bridge Over the CSX Corridor** **Broward County, FL**	22. YEAR COMPLETED PROFESSIONAL SERVICES 2008	CONSTRUCTION *(if applicable)* 2008	

23. PROJECT OWNER'S INFORMATION

a. PROJECT NAME	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District 4	Donovan Pesson, P.E. 3400 W. Commercial Blvd. Ft. Lauderdale, FL 33309	(954) 777-4442

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

The scope of the final design contract entailed the production of construction drawings and bid documents for two separate roadway plans packages comprising segment 1 and segments 2 and 3 of the Andrews Avenue Extension corridor.

For the Segment 1 Package, Keith and Schnars designed and permitted the construction of a new 4-lane divided facility from NW 10th Street to NW 18th Street. This included the design of two signalized intersections, the signing and marking plan, a new closed storm drainage and retention pond system, sound barrier walls, landscape plans, and a new street lighting system.

The landscape design included application of xeriscape principles to the planting design, boulders, rock walls and irrigation. K&S was also responsible for all design survey and utility location and coordination.

Keith and Schnars' extensive public involvement plan helped gain public acceptance for the City of Pompano's simultaneous corridor re-development plans that were central to the project necessity. Coordination with Broward County Transit ensured that the location and extent of transit features such as bus stops, bike lanes and pedestrian features were accommodated in the final construction documents.

For the Segment 2 and 3 Package, Keith and Schnars designed and permitted the construction of a new 4-lane divided facility from Atlantic Boulevard to NW 10th Street. This portion of the project included the design of a grade separated crossing of Andrews Avenue over the CSX rail corridor and Martin Luther King Jr. Boulevard. The structural design involved a continuous span, 604-ft. long, 3 span continuous steel plate girder bridge carrying Andrews Avenue grade separation over the CSX rail corridor and Martin Luther King Jr. Boulevard as well as the associated MSE retaining wall approaches, culverts, and signal support structures.

Also included were the design and permitting of a new closed storm drainage and retention pond system, four signalized intersections, the signing and marking plans, landscape plans, and a new street lighting system.

Team Positions: Principal-In-Charge – Mark Moshier, P.E., Project Manager – C. Bryan Wilson, P.E., Roadways –Carlos Alcantara, P.E., Mark Kline, P.E., Structural - Barbara King-Russell, P.E., Coriann Salas, P.E., Survey – Eric Wilhjelm, P.S.M., Landscape – Bruce Reed, R.L.A.
Design Fees: $600,000 (Segment 1) $1,200,000 (Segment 2&3)
Construction Fees: $11,000,000 (Segment 1) $28,000,000 (Segment 2&3)

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		F. EXAMPLE PROJECT KEY NUMBER 8
21. TITLE AND LOCATION *(City and State)* **Crosstown Parkway and Becker Road I-95 Interchanges** St. Lucie County, FL	22. YEAR COMPLETED PROFESSIONAL SERVICES 2005	CONSTRUCTION *(If applicable)* 2009

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Port St. Lucie	Patricia Roebling, P.E. 121 S.W. Port St. Lucie, Blvd., Building B Port St. Lucie, FL 34984	(772) 871-5177

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

Keith and Schnars prepared the Systems Interchange Justification Report (SIJR), Project Development and Environment (PD&E) Studies, and Final Design activities for two new interchanges on II-95 at Crosstown Parkway and Becker Road for the City of Port St. Lucie. The City of Port St. Lucie is consistently ranked among the fastest growing Cities in the nation by the U.S. Census Bureau for cities over 100,000. This explosive growth coupled with the extensive developments being planned west of I-95 will overburden the two existing I-95 interchanges in the City by 2010. In order to meet the traffic demand, the City desperately needed these two new interchanges. Keith and Schnars assisted the City by preparing a project master schedule that fast-tracked the SIJR, PD&E and Final Design by over-lapping these activities and preparing the critical path for a very ambitious 22 month schedule.

Given that two new interchanges were studied, Keith and Schnars traffic planners and engineers prepared a Systems IJR, which evaluates the three existing and the contribution of the two proposed interchanges to justify the need for the additional interchanges. Extensive coordination was required with the eight Developments of Regional Impact (DRI) that were planned/near completion west of I-95 to accurately model the anticipated traffic demand from these developments. Extensive traffic modeling and close coordination was critical with FDOT and the Federal Highway Authority (FHWA). Utilizing traffic information generated from the SIJR, Keith and Schnars prepared the required PD&E documents including the Categorical Exclusion Type 2s (CE 2), Preliminary Engineering Reports (PER) and supporting environmental and engineering documents for the two interchanges. Advanced drafts of the reports were submitted to FDOT to aid in the efficient review of the documents.

Keith and Schnars highway and structural engineers designed tight diamond interchanges, complete with 6-lane divided approach roadways and a 6-lane bridge across I-95 with dual left turns in both directions for north-and southbound turning movements. Widening of the existing bridges across the C-23 and C24 Canals were also designed. Services provided in addition to traffic and transportation planning included route and right-of-way survey and mapping, highway design, structural design, drainage, lighting, signing & marking, signals, utility coordination, environmental permitting, and landscape plans for both interchanges. Design documents were completed on time, and the construction was started in 2007. The interchanges opened to traffic in 2009.

Team Positions: Roadway – Matt Neddeff, P.E., Structural - Barbara King-Russell, P.E., Coriann Salas, P.E.; Environmental - John Abbott, P.G.; Permitting - Joyce Howland, Survey – Eric Wilhjelm, P.S.M., Landscape – Bruce Reed, R.L.A.
Design Fees: 6,100,000 (Becker Road and Crosstown Parkway, combined)
Construction Fees: $36,000,000 (Becker Road), $40,000,000 (Crosstown Parkway)

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)			30. EXAMPLE PROJECT KEY NUMBER 9
21. TITLE AND LOCATION (City and State) I-95 Managed Lanes Miami-Dade County, FL		22. YEAR COMPLETED PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable) 2009

23. PROJECT OWNER'S INFORMATION

a. PROJECT NAME	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District 6	Jason Chang, P.E. 1000 NW 111th Avenue Miami, FL 33172	(305) 470-5331

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

Keith and Schnars was the Program Manager for the development of the I-95 Managed Lane project in Miami-Dade County. We prepared the RFP for the Design/Build Contract for modifications for construction of two (2) Managed Lanes on I-95 Northbound and Southbound from approximately South of the NW 32nd Street bridge (MP 3.600) to North of the SR-826 (Golden Glades) interchange (MP 13.827), and including the SR-112 Interchange. For the RFP, we prepared 30% highway, signing and pavement marking and bridge design plans, the LRFR load ratings, preliminary design calculations and contract documents and specifications. As Program Manager, we coordinated with all necessary FDOT entities, including participation in the Value Engineering process, in order to fast-track this project. Keith and Schnars was responsible for reviewing all roadway and bridge elements including, but not limited to lane transitions, pavement design, pavement markings, drainage changes or modifications, and potential completion of the exception process. Work included, design and construction including ingress/egress South of NW 32nd Street, ingress/egress between NW 85th Street and NW 90th Street, and ingress/egress between NW 146th Street and NW 151st Street.

The structures in this project include:

- I-95 over NW 35th and 36th Streets: 4-span, 279-ft bridge, widened with three modified AASHTO Type III beams on hammerhead piers. Special foundation details were provided due to existing overhead utilities which would interfere with traditional pile driving operations.
- I-95 over ES connector Ramp: 3-span, 246-ft heavily skewed bridge, widened with four modified AASHTO Type IV beams on two-column piers on prestressed piles.
- I-95 over WN Connector Ramp: 3-span, 240-ft heavily skewed bridge, widened with modified AASHTO Type IV beams on two and three column piers on prestressed piles.
- I-95/SR-112 Flyover Bridges: Due to existing piers interfering with widening of I-95, two piers on each Flyover were removed, resulting in the central 300-ft four spans becoming two spans. The vertical profile was raised from the existing profile to accommodate the deeper steel girders required for the longer spans. For remaining spans, which were affected by the raised profile, the superstructure was raised to match the new profile.
- I-95 over I-195/SR-112: Four-span, 172-ft skewed bridge, widened with four modified AASHTO Type II beams on 2 column piers on prestressed piles. Piers are designed to utilize abandoned Flyover pier columns.
- HOV Connector/Ramp "Z" Flyover Bridge: Three piers, which conflict with the I-95 widening, were modified to remove interfering columns, while keeping the existing superstructure intact. One pier was changed from a three-column pier to a single-column pier with a post-tensioned concrete cantilevered cap. Two piers were modified by lengthening the existing steel bent cap, adding a new column and footing, and removing the conflicting column.

MSE Wall control drawings were provided to accommodate the widening of I-95 for the addition of two new Managed Lanes.
Team Positions: Principal-In-Charge – Mark Moshier, P.E., Roadways – C. Bryan Wilson, P.E., Carlos Alcantara, P.E.; Structural – Coriann Salas, P.E., Jonni Joannou, P.E., Barbara King-Russell, P.E.
Construction Fees: $139,000,000

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)			20. EXAMPLE PROJECT KEY NUMBER 10
21. TITLE AND LOCATION *(City and State)* Coconut Creek Main Street Master Plan Boca Raton, FL	22. YEAR COMPLETED PROFESSIONAL SERVICES 2004	CONSTRUCTION *(If applicable)* N/A	

23. PROJECT OWNER'S INFORMATION

a. PROJECT NAME	c. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Coconut Creek	Sheila Rose Government Center 4800 West Copens Road Coconut Creek, FL 33063	(954) 973-6770

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost.)*

Keith and Schnars is part of the team that worked with the City of Coconut Creek to prepare a Main Street Design Manual for the creation of a pedestrian oriented green community in one of the last large tracts of undeveloped infill parcels in northern Broward County. Keith and Schnars was responsible for analyzing the existing infrastructure and quantifying the impacts of the proposed development. The Landscape Architecture Department designed the streetscapes, assisted in the preparation of a traffic analysis and land use plan amendment for the City. The amendment allowed for creation of a designation of "Regional Activity Center" for this project.

Team Positions: Principal-in-Charge – Michael L. Davis; Landscape Architect – Bruce Reed, R.L.A. , P.G.; Permitting – Joyce Howland
Fees: $83,500
Construction Fees: N/A

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Keith and Schnars	Fort Lauderdale, FL	Prime

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below, before completing table. Place "X" under project key number for project participation same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Michael L. Davis	Principal-in-Charge			X					X		X
Mark Moshier, P.E.	QA/QC Design	X								X	
C. Bryan Wilson, P.E.	Project Manager	X		X	X	X	X	X	X	X	
Mark Kline, P.E.	Roadway Design				X	X		X			
Matt Neddeff, P.E.	Signing and Pavement Marking/Utility Coordinator			X	X		X	X	X	X	
Coriann Salas, P.E.	Structural Design		X	X				X	X	X	
Jonni Joannou, P.E.	Structural Design	X						X	X	X	
Barbara King-Russell, P.E	Structural Design	X	X					X	X	X	
Robert K. Krisak, P.L.S.	Survey and Mapping			X	X	X		X	X	X	
Eric Wilhjelm, P.S. M.	Survey and Mapping				X	X		X	X		
John Abbott, P.G.	Environmental			X					X		X
Joyce Howland	Permitting	X		X	X			X	X	X	
Bruce Reed, RLA	Landscape Architecture	X		X	X	X	X	X	X	X	X

29. EXAMPLE PROJECT KEY

No.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	No.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1.	**Evans Crary Sr. Bridge**	6.	**Biscayne Boulevard Project**
2.	**I-595 Express Corridor Improvements Project**	7.	**Andrews Avenue Segments 1, 2 & 3**
3.	**Crosstown Parkway Extension Project Development and Environmental Impact Statement**	8.	**Crosstown Parkway and Becker Road I-95 Interchanges**
4.	**I-95 RRR**	9.	**I-95 Managed Lanes**
5.	**Powerline Road Widening PD&E and Final Design**	10.	**Coconut Creek Main Street Master Plan**

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Keith and Schnars is a firm dedicated to the timely and fees-efficient delivery of our services. In fact, in 2007, when the Florida Department of Transportation released its annual summary of design overruns (time and money), Keith and Schnars ranked among the best of the over two hundred firms surveyed. In the six-year period studied, Keith and Schnars designed and surveyed twelve projects with a construction value in excess of $120 million dollars. Our average fees overun for the period was only 4%, while our average construction time overrun was 1%. **No other firm selected by FDOT in that six-year period completed this volume of work, and maintained such low overruns in fees and time.**

This commitment to customer service and high professional standards has also earned us other peer and industry recognition. For instance, last year (for the third year in a row) we took home a ***Best Places to Work Award*** at an event co-sponsored by Polk Works Workforce 2020 and the United Way of Central Florida. In 2007, the Florida Chapter of the American Planning Association selected one of our planning projects, the *South Miami-Dade Watershed Study and Plan,* for a prestigious ***FAPA Award of Excellence;*** McGraw-Hill Companies, publisher of *Business Week Magazine*, selected Keith and Schnars as one of the Southeast's ***Top 50 in Design;*** and *Engineering News Record* named Keith and Schnars one of the nation's ***Top 500*** engineering firms, for the fifth year in a row. The year before that Keith and Schnars took home two of the twelve ***Best in Construction Awards*** *given* out by the Florida Transportation Builders' Association, a 73-year old non-profit organization that many consider the "the voice" of Florida's road and bridge building industry.

As these awards indicate, we are a firm dedicated to our staff, to our communities, and to providing high quality consulting services across a broad range of disciplines.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE Michael L Davis

32. DATE September 18, 2012

33. NAME AND TITLE
Michael L. Davis, Vice President

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME **Keith and Schnars**			**3. YEAR ESTABLISHED** 1972 / **4. DUNS NUMBER** 072227762
2b. STREET 6500 North Andrews Avenue			**5. OWNERSHIP** **a. TYPE** Corporation
2c. CITY Fort Lauderdale	**2d. STATE** FL	**2e. ZIP CODE** 33309	**b. SMALL BUSINESS STATUS** N/A
6a. POINT OF CONTACT NAME AND TITLE Michael L. Davis, Vice President			**7. NAME OF FIRM** *(If block 2a is a branch office)* N/A
6b. TELEPHONE NUMBER (954) 776-1616	**6c. E-MAIL ADDRESS** mdavis@keithandschnars.com		
8a. FORMER FIRM NAME(S) *(If any)*			**8b.YR ESTABLISHED** / **8c. DUNS NUMBER** 072227762

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	(2) BRANCH
02	Administrative	18	
06	Biologist	4	
07	CADD Technician	3	
12	Civil Engineer	4	
15	Construction Inspector	13	
24	Environmental Scientist	6	
30	Geologist	1	
38	Land Surveyor	10	
39	Landscape Architect	8	
47	Planner: Urban/Regional	3	
57	Structural Engineer	4	
60	Transportation Engineer	6	
62	Water Resources Engineer	2	
	Attorney	1	
	Construction Engineer	6	
	Engineering Technician	8	
	Marketing, Graphics Public Involvement	5	
	MIS Managers/Support	2	
	Planners: Transportation	6	
	Total	110	

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
B02	Bridges	4
C15	Construction Management	6
C16	Construction Surveying	5
E01	Ecological Surveys	3
E09	Environmental Impact Studies Assessments	3
E11	Environmental Planning	2
G06	Graphic Design	1
H07	Highways, Streets	5
L02	Land Surveying	5
L03	Landscape Architecture	5
P05	Planning - Community	3
P06	Planning –Site	2
T03	Traffic & Transportation Engineering	4
T05	Topographic Surveying & Mapping	5
W02	Water Resources	4
W03	Water Supply – Treatment & Distribution	3
	Civil Engineering General Services	3
	Public Involvement & Outreach Services	1

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	8
c. **Total Work**	8

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1.	Less than $100,000	6.	$2 million to less than $5 million
2.	$100,000 to less than $250,000	7.	$5 million to less than $10 million
3.	$250,000 to less than $500,000	8.	$10 million to less than $25 million
4.	$500,000 to less than $1 million	9.	$25 million to less than $50 million
5.	$1 million to less than $2 million	10.	$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE Michael L Davis	**b. DATE** September 18, 2012

ARCHITECT – ENGINEER QUALIFICATIONS

PART I – CONTRACT SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION *(City and State)*
Professional Engineering Design Services for Crosstown Parkway Extension Manth to US1 (Port St. Lucie, Florida)

PUBLIC NOTICE DATE	3. SOLICITATION OR PROJECT NUMBER
	20120061

B. ARCHITECT – ENGINEER POINT OF CONTACT

4. NAME AND TITLE
Christian Jackson - Senior Drainage Engineer/Project Manager

5. NAME OF FIRM
Reynolds, Smith and Hills, Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
(954) 474-3005	(954) 474-3006	chris.jackson@rsandh.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

	(Check) PRIME	(Check) J-V PARTNER	(Check) SUBCON-TRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.			X	Reynolds, Smith and Hills, Inc. [X] CHECK IF BRANCH OFFICE	3125 West Commercial Boulevard Suite 130 Fort Lauderdale, FL 33309-3448	Drainage Services
b.			X	Reynolds, Smith and Hills, Inc. [ ] CHECK IF BRANCH OFFICE	10748 Deerwood Park Boulevard, South Jacksonville, FL 32256	Structures, Peer Review Services
c.				CHECK IF BRANCH OFFICE		
d.				CHECK IF BRANCH OFFICE		
e.				CHECK IF BRANCH OFFICE		
f.				CHECK IF BRANCH OFFICE		

D. ORGANIZATIONAL CHART OF PROPOSED TEAM [ ] *(Attached)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Christian Jackson	Senior Drainage Engineer	13	7

15. FIRM NAME AND LOCATION *(City and State)*
Reynolds, Smith and Hills, Inc., Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Master of Business Administration / Business Administration Bachelor of Science / Environmental Engineering	FL / Civil Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
LEED Accredited Professional, 2009
Florida Advanced Work Zone Traffic Control Certification
Florida Certified Stormwater Pollution Prevention Inspector

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Indian Street Bridge Design-Build Martin County, Florida	Ongoing	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **X** Check if project performed with current firm

RS&H is the lead design subconsultant in the design-build of the Indian Street Bridge in Stuart, Florida. The project involves the construction of a new 3,069-foot, high-level fixed-span concrete bridge over the St. Lucie River that connects the cities of Palm City and Stuart.
Role: Senior Drainage Engineer and Environmental Permitting Agent

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
I-95 Express Lanes Phase 2 Design-Build Project, Miami-Dade and Broward County, Florida.	Ongoing	2014 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **X** Check if project performed with current firm

Senior Drainage Engineer and Environmental Permitting Agent for a 14-mile interstate widening project and HOV lane conversion project.
Role: Senior Drainage Engineer and Environmental Permitting Agent

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
I-595 Corridor Design Consultant Contract Broward County, Florida	Ongoing	2014 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **X** Check if project performed with current firm

10-mile interstate widening and reconstruction project.
Role: Senior Drainage Engineer and Environmental Permitting Agent

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Districtwide Drainage Studies and Environmental Permits Contract Broward, Indian River, Martin, Palm Beach, and St. Lucie Counties	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **X** Check if project performed with current firm

Drainage and permitting task work order contract that involves all aspects of drainage analysis, design and permitting for projects throughout FDOT District Four.
Role: Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
I-75 Managed Lanes Project Miami-Dade and Broward Counties, Florida	Ongoing	2017 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **X** Check if project performed with current firm

Senior Drainage Engineer and Environmental Permitting Agent for a 16-mile interstate widening project and new express lane project.
Role: Senior Drainage Engineer and Environmental Permitting Agent

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Robert Templeton, PE, CFM	Drainage Engineer	5	5

15. FIRM NAME AND LOCATION *(City and State)*
Reynolds, Smith and Hills, Inc., Fort Lauderdale, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Master of Science / Civil Engineering Bachelor of Science / Civil Engineering Associate of Arts / Business Administration	FL / Civil Engineer Registered Certified Floodplain Manager (No. US-08-03358), 2008

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Member, American Society of Civil Engineers

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Indian Street Bridge Design-Build
Martin County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2011	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is the lead design subconsultant in the design-build of the Indian Street Bridge in Stuart, Florida. The project involves the construction of a new 3,069-foot, high-level fixed-span concrete bridge over the St. Lucie River that connects the towns of Palm City and Stuart.
Role: Drainage Designer

b.

(1) TITLE AND LOCATION *(City and State)*
I-595 Corridor Design Consultant Contract
Broward County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2010	2014 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

10-mile interstate widening and reconstruction project.
Role: Drainage Designer

c.

(1) TITLE AND LOCATION *(City and State)*
SR-A1A/Ocean Drive Shoreline Protection Project
St. Lucie County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2012	2014 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Assisted with design of permanent retaining wall system and other roadside improvements, environmental permitting, roadway analysis and design, traffic control plans, and plans production.
Role: Roadway Project Engineer

d.

(1) TITLE AND LOCATION *(City and State)*
Fort Lauderdale-Hollywood International Airport, Expansion of Runway 9R-27L
Broward County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2011	2015 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Assisted with permitting, analysis of pre-development drainage conditions, design of proposed stormwater management systems, including pond and swale design and nutrient loading analysis, and development of permit drawings and plans. Assisted with dewatering design and permitting.
Role: Drainage Engineer

e.

(1) TITLE AND LOCATION *(City and State)*
Andrews Avenue from NW 18th Street to North of Copans Road Project, Broward County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2012	2014 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Drainage Designer. Assisted with the design of the drainage system; set drainage structure and pipe flow line elevations, evaluated surplus requests and assisted with plans production.
Role: Drainage Designer

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Jeffrey Glenn, PE, D.WRE, CFM	Senior Water Resources Engineer	28	10

15. FIRM NAME AND LOCATION *(City and State)*
Reynolds, Smith and Hills, Inc., Orlando, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*	
Master of Science / Civil Engineering	FL / Civil Engineer	NC / Civil Engineer
Bachelor of Science / Civil Engineering	NH / Civil Engineer	TX / Civil Engineer
	MA / Civil Engineer	CT / Civil Engineer
	GA / Civil Engineer	US / NCEES
	RI / Civil Engineer	VA / Civil Engineer
	ME / Civil Engineer	IL / Civil Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Diplomate, Water Resources Engineer (No. 43), 2005
Certified Floodplain Manager, Association of State Floodplain Managers (No. US-07-03135), 2007
Land Surveyor-In-Training, Pennsylvania, 1988

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Indian Street Bridge Design-Build
Martin County, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2010	2013 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is the lead design subconsultant in the design-build of the Indian Street Bridge in Stuart, Florida. The project involves the construction of a new 3,069-foot, high-level fixed-span concrete bridge over the St. Lucie River that connects the towns of Palm City and Stuart.
Role: Senior Drainage Engineer

b.

(1) TITLE AND LOCATION *(City and State)*
I-95 Widening from SR 44 to I-4 in Volusia County
Volusia County, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2010	Not started

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

A 10.5-mile long, $90 million project that includes widening I-95 from four to six lanes with milling and resurfacing over the existing four lanes.
Role: Senior Drainage Engineer

c.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

d.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

e.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
G. Ben Lehr, PE, LEED AP	Bridge Engineer	13	10

15. FIRM NAME AND LOCATION *(City and State)*
Reynolds, Smith and Hills, Inc., Jacksonville, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Master of Engineering / Structural Engineering Bachelor of Science / Civil Engineering	FL / Civil Engineer TX / Civil Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
LEED Accredited Professional, 2009

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Indian Street Bridge Design-Build
Martin County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2010	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is the lead design subconsultant in the design-build of the Indian Street Bridge in Stuart, Florida. The project involves the construction of a new 3,069-foot, high-level fixed-span concrete bridge over the St. Lucie River that connects the towns of Palm City and Stuart.
Role: Structural Engineer of Record and Design Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*
Overland Bridge Replacement
Jacksonville, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2015 (estimated)	2015 (estimated)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

The project consists of 2.56 miles of full interstate reconstruction in the heart of downtown Jacksonville, including 12 new bridges and three bridge widenings, and over 4 miles of permanent retaining walls.
Role: Structural Engineer of Record, Structural Coordination Lead

c.

(1) TITLE AND LOCATION *(City and State)*
Bridge of Lions Rehabilitation
St. Augustine, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2004	2011

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

RS&H is the lead design consultant for the historic $88 million rehabilitation and restoration of the Bridge of Lions. The 1,500-foot-long bridge over the Matanzas River consists of arched steel-plate girder approach spans on concrete piers with a bascule span at the center of the bridge to accommodate river vessel traffic.
Role: Bridge Engineer

d.

(1) TITLE AND LOCATION *(City and State)*
US 90 Bridge over Saint Louis Bay
Hancock County, Mississippi

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2008	2008

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is a major bridge design subconsultant to Granite Archer Western Joint Venture Contractors in the design-build project to replace the 2.1-mile, four-lane structure that was destroyed by Hurricane Katrina.
Role: Bridge Engineer/Project Manager

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Richard (Dick) Wallace, PE	Senior Bridge Engineer	40	37

15. FIRM NAME AND LOCATION *(City and State)*
Reynolds, Smith and Hills, Inc., Jacksonville, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
Bachelor of Science / Civil Engineering

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

FL / Civil Engineer	GA / Civil Engineer
SC / Civil Engineer	MS / Civil Engineer
TX / Civil Engineer	NC / Civil Engineer
AL / Civil Engineer	MI / Civil Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Member, American Concrete Institute
Member, American Segmental Bridge Institute
Member, Florida Engineering Society

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Bridge of Lions Rehabilitation
St. Augustine, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2004	2011

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is the lead design consultant for the historic $76 million rehabilitation and restoration of the Bridge of Lions. The 1,500-foot-long bridge over the Matanzas River consists of arched steel-plate girder approach spans on concrete piers with a bascule span at the center of the bridge to accommodate river vessel traffic.
Role: Engineer of Record for the approach span superstructures

b.

(1) TITLE AND LOCATION *(City and State)*
SR 312 over Intracoastal Waterway
St. Augustine, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
1997	1999

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

A 3,600-foot high-level bridge utilizing state-of-the-art software to achieve a 250-foot channel span, consisting of a ten-foot deep, three-staged post-tensioned continuous concrete beam unit. Precast concrete segmental units used for piers, including ship impact.
Role: Supervisory and Quality Assurance (QA) Engineer and Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*
SR 858 over Intracoastal Waterway
Hallandale, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
1998	2003

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Twin bascule bridges with elements including post-tensioned concrete boxes for bascule approaches, with double leaves that have a 187-foot trunnion-to-trunnion span. Bascule piers designed for ship impact.
Role: Supervisory and Quality Assurance Engineer

d.

(1) TITLE AND LOCATION *(City and State)*
SR 9A (Mill Cove Trestle portion of Dames Point Bridge) over St. Johns River
Jacksonville, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
1984	1989

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Design of 4,000-foot approach (to cabled stay main span). Special design areas included long unsupported 24-inch concrete piles and a complex pile load testing system.
Role: Supervisory and Quality Assurance Engineer

e.

(1) TITLE AND LOCATION *(City and State)*
SR 826 over Intracoastal Waterway
Sunny Isles, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
1999	1985

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Design of 1,400-foot twin bridges. Designed double-leaf bascule leaves, precast beam approach spans, ship impact foundations, and portions of the machinery.
Role: Design Engineer

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Robert Woodruff, PE	Senior Bridge Engineer	24	11

15. FIRM NAME AND LOCATION *(City and State)*
Reynolds, Smith and Hills, Inc., Jacksonville, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science / Civil Engineering Associate of Arts / General	FL / Civil Engineer SC / Civil Engineer NC / Civil Engineer GA / Civil Engineer MS / Civil Engineer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Member, American Institute of Steel Construction

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Indian Street Bridge Design-Build
Martin County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2010	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is the lead design subconsultant in the design-build of the Indian Street Bridge in Stuart, Florida. The project involves the construction of a new 3,069-foot, high-level fixed-span concrete bridge over the St. Lucie River that connects the towns of Palm City and Stuart.
Role: Project Engineer

b.

(1) TITLE AND LOCATION *(City and State)*
Bridge of Lions Rehabilitation
St. Augustine, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2004	2011

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

RS&H is the lead design consultant for the historic $76 million rehabilitation and restoration of the Bridge of Lions. The 1,500-foot-long bridge over the Matanzas River consists of arched steel-plate girder approach spans on concrete piers with a bascule span at the center of the bridge to accommodate river vessel traffic.
Role: Bridge Engineer

c.

(1) TITLE AND LOCATION *(City and State)*
A1A Bridge over Shad Creek
Duval County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2008	2011

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Design of this 220-foot, four-span, Type II AASHTO girder bridge with prestressed concrete pile bents. Provided post design services throughout construction of the project.
Role: Project Manager/Engineer of Record

d.

(1) TITLE AND LOCATION *(City and State)*
A1A Bridge over the Matanzas River
St. Johns County, Florida

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
2009	2012

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

X Check if project performed with current firm

Design of this 575-foot, four-span, Type IV AASHTO girder bridge with prestressed concrete pile bents. Provided post design services throughout construction of the project.
Role: Project Manager/Engineer of Record

e.

(1) TITLE AND LOCATION *(City and State)*

(2) YEAR COMPLETED	
PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Provide up to ten projects as requested by the agency, or 10 projects if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 1

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Indian Street Bridge Design-Build Martin County, FL	Ongoing (Post-Design)	2013 (estimated)

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Archer Western Contractors, LLC	Kevin McGlinchey	(813) 849-7510

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

RS&H is serving as lead design engineer in the design and construction of Indian Street Bridge, the largest design-build project awarded by the Florida Department of Transportation in 2009, with funding from the American Recovery and Reinvestment Act (ARRA). The project includes two miles of CR 714 on new alignment, the reconstruction of the Mapp Road and SR 76 intersections, and a 3,100-foot, high-level Category 2 bridge structure built within a highly sensitive environmental corridor. The new bridge over the South Fork of the St. Lucie River will link Palm City and Stuart, and will provide an important segment in the new connection between Florida's Turnpike and US 1/SR 5. Once constructed, it will ease congestion, speed emergency response times, and provide an alternative emergency evacuation route.

The location of the Indian Street Bridge required the team to develop several different drainage designs to address the particular needs of the environments. A treatment train methodology was used on the western side of the bridge, which is more residential and an environmentally sensitive area. Wide grassed dry retention swales provide pre-treatment for roadway runoff prior to overflow into a wet detention pond, with ultimate discharge to the South Fork of the St. Lucie River. On the eastern side of the bridge, which is more commercialized, a closed system with curb inlets and pipes collects and conveys stormwater runoff into a dry retention/detention pond with overflow into the Coral Gardens Creek. All bridge runoff is accommodated with bridge deck drainage, which conveys into the proposed stormwater management systems and is designed to meet water quality, attenuation, floodplain, and nutrient loading reduction requirements.

The design was completed on an accelerated schedule with all environmental permits submitted within 24 days of contract execution. The team undertook an extensive effort to complete the necessary drainage plans, drainage report, and documentation required to obtain the required environmental permits for this project and to subsequently defend the permit approval in a Division of Administrative Hearing. The obtained permits included a South Florida Water Management District (SFWMD) Individual Environmental Resource Permit, SFWMD Water Use for Dewatering Permit, United States Army Corps of Engineers Dredge/Fill Permit, and United States Coast Guard Bridge Permit.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Reynolds, Smith and Hills, Inc.	Fort Lauderdale, FL	Roadway and Bridge, Traffic, Control, Drainage, Utility Design, Public Involvement
b.	Reynolds, Smith and Hills, Inc.	Jacksonville, FL	Roadway and Bridge, Traffic, Control, Drainage, Utility Design, Public Involvement
c.			

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 2

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Bridge of Lions Rehabilitation St. Augustine, FL	2004	2011

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District Two	Craig Teal, PE	(386) 961-7703

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

RS&H was selected by District Two of the FDOT to prepare construction plans and specifications for the $88 million historic rehabilitation of the Bridge of Lions. At its opening in 1927, the Bridge of Lions was described as "Dixie's handsomest span". The eclectic Mediterranean Revival style approach and bascule spans were designed to be an extension of the architectural character of the nation's oldest city. In recognition of the bridge's aesthetic and economic impacts, the Bridge of Lions was added to the National Register of Historic Places in 1982. In response to bridge deterioration, the FDOT selected rehabilitation, rather than replacement, as the best balance between transportation needs, public safety, and historic preservation. RS&H lead the design team that combined the skills of engineers, historians and urban designers in design and rehabilitation efforts that included:

- I-95 Express Lanes Design-Build Project, Florida Department of Transportation, District Four, Broward County, Florida--Project Drainage Engineer. Responsible for preparing erosion control plans, drainage plans, drainage report, and environmental permit applications. Responsible for preparing spread calculations to determine trench drain required to accommodate spread within median due to reduced shoulder widths and increased contributing runoff, pre- and post-development drainage maps, water quality/water quantity calculations, and drainage quantities.
- Preparing detailed specifications and plans for the removal, off-site rehabilitation, and re-erection of the distinctive steel, arch-shaped riveted plate girders to maintain bridge aesthetics as seen in elevation.
- Structural and architectural rehabilitation of the bascule piers flanking the channel span and the associated octagonal observation towers. Several foundation-strengthening elements were installed in access-restrictive environments to meet current ship impact and scour requirements.
- Replacement of existing approach piers with replacement piers that replicate the elephantine columns and partial web wall bents of the original approach piers while accommodating a wider bridge.
- Reinstallation of original lost elements such as ornamental railing, light standards, luminaries, and ornamental gates in concert with a return to original paint colors and concrete finishes.
- Preparing construction documents to return western approach landscaped areas to their original appearance including riverside promenade, associated decorative post and chain railing and light fixtures complementary to the bridge's light fixtures.
- Design of a 1,600-foot temporary bridge complete with movable span to accommodate vehicle, marine and pedestrian traffic throughout the rehabilitation of the permanent bridge.
- Roadway alignment and lane improvements to improve safety and traffic circulation in the immediate vicinity of the bridge.
- Securing all necessary permits required by the St. Johns River Water Management District, the USCG and the USACOE.
- A public involvement program to communicate project developments with the St. Augustine residents.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Reynolds, Smith and Hills, Inc.	Fort Lauderdale, FL	Lead Design Consultant
b.	Reynolds, Smith and Hills, Inc.	Jacksonville, FL	Lead Design Consultant
c.			

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 3

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
I-95 Express Lanes Phase 2 Design-Build Project Broward County, Florida	Ongoing (Post-Design)	2014 (estimated)

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Metric Engineering, Inc.	Dale Cody, PE	(407) 644-1898

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

RS&H is serving as a significant subconsultant on the Hubbard Construction/Metric Engineering design-build team to complete the final phase of the *I-95 Express* lanes through Miami-Dade County, as well as the first phase through Broward County. The project extends from north of the Golden Glades interchange to south of the Broward Boulevard Park & Ride and the Ives Dairy Road interchange from NE 16th Avenue to east of Highland Lakes Boulevard.

RS&H worked closely with the design-build team to develop an innovative and cost-effective design that led to a bid of $25 million under the programmed budget, allowing the Florida Department of Transportation (FDOT) to supplement the contract with upgraded bridge improvements at seven existing bridge structures. These bridges will be widened to address shoulder restrictions and enhance public safety. RS&H provided a detailed finite element model analysis of two of the existing structures to verify that the bridges were suitable for widening. RS&H also performed significant field measurements because record as-built plans were not readily available.

After the project was awarded with the amended scope, the team provided an accelerated schedule that allowed for 60 percent plan submittals with changes within 60 days of award. RS&H was responsible for developing a permitting strategy that would address this revised schedule yet obtain approval of the requested changes without delay. RS&H's structural analysis and proposed permitting activities saved valuable time and reduced construction costs. The resulting bridge widening simplified the staging of construction, maintenance of traffic, and reduced impacts to sensitive environmental areas and secondary roads.

Due to the widening of the corridor into the existing stormwater management facilities, significantly more impervious area was required. RS&H prepared a drainage design that enabled the Department to achieve its roadway, structure, and ITS objectives while maintaining conformance with FDOT and South Florida Water Management District (SFWMD) requirements and without the need for acquisition of new right-of-way in an already constrained corridor.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Reynolds, Smith and Hills, Inc.	Fort Lauderdale, FL	Toll Collection Facilities, Drainage Design, Landscape Architecture, Permitting, Bridge and Structure Design
b.	Reynolds, Smith and Hills, Inc.	Jacksonville, FL	Toll Collection Facilities, Drainage Design, Landscape Architecture, Permitting, Bridge and Structure Design
c.			

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, up to 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER 4

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
I-595 Corridor Design Consultant Contract Broward County, FL	Ongoing (Construction Oversight)	2014 (estimated)

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FDOT District Four	Vanita Saini	(954) 777-4468

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

RS&H is currently serving as Corridor Design Consultant for the I-595 Corridor Roadway Improvements project, which involves the reconstruction, widening, and resurfacing of 10.5 miles of the I-595 mainline. The project includes all associated adjacent cross-roads, frontage roads, and ramps from the I-75/Sawgrass Expressway interchange to the I-595/I-95 interchange. The estimated $1.5 billion improvements include the addition of auxiliary lanes, bypass and braided ramps, collector-distributor roadways, and a tolled reversible express lanes system in the I-595 median with a direct connection to Florida's Turnpike. The express lanes will be tolled at varying rates throughout the day to provide for the continual free flow of traffic.

Serving as an extension of District Four staff, RS&H is responsible for the refinement of the PD&E preferred alternative concept, development of the corridor Master Design Plan, and management support during the design and construction phases of the project. Additional responsibilities include: scheduling; utility, drainage, and permitting management and coordination; right-of-way documentation for acquisition; development and maintenance of the project website; design and construction procurement support; development and implementation of the public involvement plan; preparation and maintenance of the FHWA Project Management and Financial Plans; environmental studies and re-evaluation documentation; construction plans and estimate reviews; and other miscellaneous support as directed.

RS&H also serves as the Owner's Representative to the District in the development of a Public-Private Partnership (PPP), which will provide a finance mechanism for the project's funding shortfall. RS&H is assisting in the coordination of all legal, financial, and technical components of the PPP procurement process, and organized the I-595 PPP Industry Forum to inform and solicit input from over 400 prospective proposers from around the world.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Reynolds, Smith and Hills, Inc.	Fort Lauderdale, FL	Corridor Design Consultant, Owner's Representative
b.	Reynolds, Smith and Hills, Inc.	Jacksonville, FL	Corridor Design Consultant, Owner's Representative
c.			

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Christian Jackson	Senior Drainage Engineer	X		X	X						
Rosario Cardenas, PE, CFM	Senior Drainage Engineer	X		X	X						
Darren Dyer, PE	Drainage Engineer				X						
Robert Templeton, PE, CFM	Water Resources Engineer	X		X	X						
Jeffrey Glenn, PE, D.WRE, CFM	Senior Water Resources Engineer	X									
G. Ben Lehr, PE, LEED AP	Bridge Engineer	X	X		X						
Bryan Sturm, PE, NCEES	Bridge Engineer	X	X	X	X						
Richard (Dick) Wallace, PE	Senior Bridge Engineer		X	X	X						
Robert Woodruff, PE	Senior Bridge Engineer	X	X	X	X						

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Indian Street Bridge Design-Build	6	
2	Bridge of Lions Rehabilitation	7	
3	I-95 Express Lanes Phase 2 Design-Build Project	8	
4	I-595 Corridor Design Consultant Contract	9	
5		10	

H. ADDITIONAL INFORMATION

PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

SIGNATURE	DATE
	September 10, 2012

33. NAME AND TITLE

Rick E. Chesser, PE, Vice President

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: 20120061

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Reynolds, Smith and Hills, Inc.		3. YEAR ESTABLISHED: 1990	DUNS NUMBER: 096085253
2b. STREET: 3125 West Commercial Boulevard, Suite 130		5. OWNERSHIP a. TYPE: Corporation	
2c. CITY: Fort Lauderdale	2d. STATE: FL / 2e. ZIP CODE: 33309-3448	b. SMALL BUSINESS STATUS: No	
6a. POINT OF CONTACT NAME AND TITLE: Chris Jackson - Senior Drainage Engineer/Project Manager		7. NAME OF FIRM *(If block 2a is a branch office)*	
6b. TELEPHONE NUMBER: (954) 474-3005	6c. E-MAIL ADDRESS: chris.jackson@rsandh.com		
8a. FORMER FIRM NAME(S) *(If any)*		8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	(2) BRANCH
02	Administrative	96	4
06	Architect	76	1
08	CADD Technician	39	1
12	Civil Engineer	140	10
15	Construction Inspector	62	0
16	Construction Manager	20	0
21	Electrical Engineer	23	0
24	Environmental Scientist	20	2
25	Fire Protection Engineer	4	0
29	Geographic Information System	2	0
37	Interior Designer	7	0
39	Landscape Architect	4	0
42	Mechanical Engineer	33	0
47	Planners: Urban/Regional	32	0
56	Specifications Writer	27	0
57	Structural Engineer	44	0
58	Technician/Analyst	21	0
60	Transportation Engineer	69	8
62	Water Resources Engineer	18	2
	Other Employees	15	0
	Total	752	28

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
B02	Bridges	5
E09	Environmental Impact Studies, Assessments	2
G01	Garages; Vehicle Maintenanace Facilities;	1
H04	Heating, Ventilating, Air Conditioning	1
H07	Highways; Streets; Airfield Paving; Parking	7
P05	Planning (Community; Regional; Areawide &	2
T03	Traffic & Transportation Engineering	8
T06	Tunnels & Subways	1

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	6
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: Rick Chesser

DATE: September 10, 2012

c. NAME AND TITLE: Rick E. Chesser, PE - Vice President

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: 20120061

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Reynolds, Smith and Hills, Inc.		3. YEAR ESTABLISHED: 1990	DUNS NUMBER: 613387281
2b. STREET: 10748 Deerwood Park Boulevard, South		5. OWNERSHIP	
		a. TYPE: Corporation	
2c. CITY: Jacksonville	2d. STATE: FL / 2e. ZIP CODE: 32256	b. SMALL BUSINESS STATUS: No	
6a. POINT OF CONTACT NAME AND TITLE: Chris Jackson - Senior Drainage Engineer/Project Manager		7. NAME OF FIRM *(If block 2a is a branch office)*	
6b. TELEPHONE NUMBER: (954) 474-3005	6c. E-MAIL ADDRESS: chris.jackson@rsandh.com		
8a. FORMER FIRM NAME(S) *(If any)*		8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	(2) BRANCH
02	Administrative	96	58
06	Architect	76	34
16	Construction Manager	20	0
07	Biologist	1	1
08	CADD Technician	39	20
12	Civil Engineer	140	34
15	Construction Inspector	62	8
21	Electrical Engineer	23	11
24	Environmental Scientist	20	10
25	Fire Protection Engineer	4	3
29	Geographic Information System	2	1
37	Interior Designer	7	4
39	Landscape Architect	4	2
42	Mechanical Engineer	33	13
47	Planners: Urban/Regional	32	15
56	Specifications Writer	27	25
57	Structural Engineer	44	24
58	Technician/Analyst	21	12
60	Transportation Engineer	69	21
62	Water Resources Engineer	18	7
	Other Employees	14	11
	Total	752	314

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
	Design-Build	6
	Engineering Consultations and Reports	6
A05	Airports; Navaids; Airport Lighting; Aircraft	6
A06	Airports; Terminals; & Hangers; Frieght	8
B02	Bridges	4
C10	Commercial Building; (low rise); Shopping	4
C13	Computer Facilities; Computer Service	6
C15	Construction Management	4
E02	Educational Facilities; Classrooms	6
E07	Energy Conservation; New Energy Sources	6
H07	Highways; Streets; Airfield Paving; Parking	8
I01	Industrial Buildings; Manufacturing Plants	4
I05	Interior Design; Space Planning	5
L01	Laboratories; Medical Research Facilites	5
O01	Office Building; Industrial Parks	6
P05	Planning (Community; Regional; Areawide &	7
P06	Planning (Site, Installation and Project)	4
T03	Traffic & Transportation Engineering	6
	Architectural Consultation/Surveys	4
	Land Subdivision and Development	5
	Management	8
	Financial Establishments (Banks)	6

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	7
b. Non-Federal Work	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: 

DATE: September 10, 2012

c. NAME AND TITLE

Rick E. Chesser, PE - Vice President

Form **W-9**
(Rev. October 2007)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type See Specific Instructions on page 2.

Name (as shown on your income tax return)
KEITH AND SCHNARS, P.A.

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☒ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ .....
☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
6500 NORTH ANDREWS AVENUE

Requester's name and address (optional)

City, state, and ZIP code
FT. LAUDERDALE, FL 33309

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
: :

or

Employer identification number
59 : 1406307

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ▶ R. H. Keith Date ▶ September 18, 2012

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

KEITAND-01 DGARCIA

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/15/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # BR-781669
Ames & Gough
8300 Greensboro Drive
Suite 980
McLean, VA 22102

CONTACT NAME:
PHONE (A/C, No, Ext): (703) 827-2277 FAX (A/C, No): (703) 827-2279
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Travelers Indemnity Company of Connecticut	25682
INSURER B : Phoenix Insurance Company	25623
INSURER C : Hanover Insurance Company	
INSURER D : Travelers Casualty and Surety Company	19038
INSURER E : Continental Casualty Company (CNA)	20443
INSURER F :	

INSURED
Keith and Schnars, P.A.
6500 North Andrews Avenue
Ft. Lauderdale, FL 33309-2132

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY X PRO-JECT X LOC			6601C229558	8/14/2012	8/14/2013	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS HIRED AUTOS SCHEDULED AUTOS NON-OWNED AUTOS			B101175R478	8/14/2012	8/14/2013	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION$			UHR964402100	8/15/2012	8/15/2013	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UB3943T893	8/14/2012	8/14/2013	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
E	Professional Liab.			AEH 00 609 12 27	3/1/2012	3/1/2013	2,000,000	4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

Keith and Schnars, P.A.
6500 N. Andrews Avenue
Ft. Lauderdale, FL 33309-2132

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/17/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Ames & Gough 8300 Greensboro Drive Suite 980 McLean, VA 22102	PHONE (A/C, No, Ext): (703) 827-2277	FAX (A/C, No): (703) 827-2279
	E-MAIL ADDRESS: admin@amesgough.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED Keith and Schnars, P.A. 6500 North Andrews Avenue Ft. Lauderdale FL 33309-2132	INSURER A: Continental Casualty Company	20443
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 2012-2013 E **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ ☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO-JECT ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ (Mandatory in NH)	N/A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
A	PROFESSIONAL LIABILITY			AEH 00 609 12 27	3/1/2012	3/1/2013	PER CLAIM	2,000,000
							AGGREGATE	4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

Keith and Schnars, P.A.
6500 N. Andrews Avenue
Ft. Lauderdale, FL 33309-2132

CANCELLATION

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AUTHORIZED REPRESENTATIVE

Dan Knise/DGARCI